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THE

NEW LONDON PHARMACOPŒIA,

TRANSLATED AND

ARRANGED IN A TABULAR FORM,

WITH THE

EDINBURGH AND DUBLIN PHARMACOPŒIAS,

SHEWING AT ONE VIEW THE DIFFERENCES IN THE FORMULÆ

OF

THE THREE COLLEGES,

TOGETHER WITH

THE TESTS GIVEN BY EACH COLLEGE FOR THE PURITY OF THE
SEVERAL PREPARATIONS,

WITH

PRACTICAL REMARKS.

BY

Watt

PETER SQUIRE, M.R.I.

CHEMIST ON THE ESTABLISHMENT OF THE QUEEN, H.R.H. THE PRINCE ALBERT,
H.R.H. THE PRINCE OF WALES, AND THE ROYAL FAMILY.

LONDON:
JOHN CHURCHILL, PRINCES STREET, SOHO.
MDCCCLI.

LONDON:
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TO

SIR JAMES CLARK, BART., M.D., F.R.S.,

PHYSICIAN TO THE QUEEN, HIS ROYAL HIGHNESS THE PRINCE ALBERT,
ETC. ETC.

DEAR SIR,

In availing myself of your kind permission to dedicate to you this little Work, I cannot help wishing that it possessed qualities more worthy of such an honour. I am, however, hereby afforded the opportunity, I have long desired, of expressing thus publicly, the profound regard I entertain for your character, both as a man and a physician. But the work is appropriately dedicated to you on several other accounts. You have always been a warm advocate for the uniformity of Medicinal Formulæ for the United Kingdom, in other words, for a National Pharmacopœia; it was at your suggestion, some years ago, that I first began to collate and compare the analogous formulæ in them; and it may, therefore, be truly said, that, whatever little value the Work may possess, it owes it to you. Humble as are its pretensions, I still hope, that with the sanction of your name and authority, it may prove a useful index to the striking differences and discrepancies which unfortunately exist in our Pharmacopœias—differences which it is most desirable, for the sake of the public as well as the profession, and I may add, for the credit of the Colleges, should cease to exist.

I have the honour to remain,
Dear Sir,
Yours very faithfully,

THE AUTHOR.

202003

PREFACE.

It must be apparent to any one who looks into the Formulæ of our three Pharmacopœias, that the differences in strength are sufficient to justify serious apprehensions as to the consequences. When patients are travelling from one part of the kingdom to another with such rapidity, a prescription written in London may be prepared in Edinburgh or Dublin the following day, and with widely differing results; each College adhering to its own Formula in dispensing. Now, Acetum Opii of Edinburgh is *three times* the strength of Acetum Opii of Dublin; and Acetum Colchici of Dublin is *three times* the strength of Acetum Colchici of Edinburgh and London. Acetum Cantharidis differs in strength in all three, in the relation of 2, 3, and 4. Acidum Aceticum of London contains 31 per cent. of real acid, whilst Acidum Aceticum of Edinburgh, contains as much as 85 per cent.,—nearly *three times* the strength. The above remarks are confined to the two first pages in the tabular arrangement, and are calculated to arouse attention, and put the prescriber on his guard with his travelling patient.

In order to render this work useful to the medical man, the similar formulæ, are as much as possible, brought together for ready comparison, and reference to their places made, where the name appears in alphabetical order. Thus, "Liquor Iodinei Comp., Edinburgh, *vide* Liq. Potassii Iodidi Comp." because the same materials are employed in both preparations, and as the Edinburgh has 60 times more Iodide of Potassium, and 30 times more Iodine than the London and Dublin, it might be desirable in the next Edinburgh Pharmacopœia to make it like the others. With regard to Acetic Acid, not only is it highly objectionable to apply the same name to preparations so dissimilar in strength, but the great number of Acetic Acids under the several names tends to confuse. I have collected them from the three Works, and placed them together in the first page of the Materia Medica: they are ten in number. London, indeed, has Acetum Destillatum and Acid. Acet. Dilut., both of the same saturating power, but stated to have different Sp. Gr. which is an oversight. The Mineral Acids, which differed so widely before the last Dublin Edition, have been now brought nearly equal, still the strong Acids in the New London Pharmacopœia have been altered as to gravity, again throwing the exact relation of the three Colleges out. Hydrocyanic Acid of Edinburgh, now nearly twice the strength of the other two, it is to be hoped, will be made identical. The London College might have made their solutions of Hydrochlorate and of Acetate of Morphia the same as the other Colleges, instead of introducing them twice the strength. The Tincture of Quinine has lately been commented upon rather harshly; it being alleged that barely half the Quinine is now dissolved, (the Sulphuric Acid being omitted); whereas, I find that only one-fortieth part of Pelletiers Quinine is left undissolved, after being digested 7 days without any previous trituration, in the quantity of Tincture of Dried Orange Peel, ordered by the College. The Infusum Cinchonæ Spissatum, Pharm. Lond., is an elegant and efficient preparation of Bark, and far preferable to the Liquor Cinchonæ now in use.

PREFACE.

The questionable change which the Dublin College has made in the adoption of the avoirdupois, in the place of the apothecaries' or troy weight, used by the other two Colleges, renders the comparison in strength of the several formulæ difficult; and I have, therefore, printed the equivalents which I used myself, after the table of weights and measures. I have also placed the word "avoirdupois" at the head of every Dublin column, to keep that fact constantly in view. Some practical remarks will be found under the several formulæ, which have suggested themselves as likely to be useful; and as the whole contents of the three Pharmacopœias are arranged in alphabetical order, and are to be found either in the Materia Medica, or the tabular form, except the *Essential Oils*,—these are placed in the Appendix, together with what is referred to in that alphabetical arrangement; no Index is therefore given.

277, Oxford Street,
July, 1851.

WEIGHTS AND MEASURES

EMPLOYED IN THE THREE PHARMACOPŒIAS.

SYMBOLS.

WEIGHTS.			MEASURES.		
lb.	represents	a pound.	C	represents	a gallon.
℥	„	an ounce.	O	„	a pint.
ʒ	,	a drachm.	fl ℥	„	an ounce.
℈	„	a scruple.	fl ʒ	„	a drachm.
gr.	„	a grain.	m.		a minim.

WEIGHTS.

LONDON AND EDINBURGH.

TROY (OR APOTHECARIES).

1 Pound	= 12 ounces	=	5760	grains.
1 Ounce	= 8 drachms	=	480	„
1 Drachm	= 3 scruples	=	60	„
1 Scruple	=		20	„

DUBLIN.

AVOIRDUPOIS (MODIFIED).

1 Pound	= 16 ounces	=	7000	grains.
1 Ounce	= 8 drachms	=	437·5	„
1 Drachm	= 3 scruples	=	54·7	„
1 Scruple	=		18·22	„

MEASURES

Are the same for all Three of the Pharmacopœias; viz. the Imperial Standard, the gallon of which contains 277·274 Cubic Inches.

1 Gallon	= 8 pints	=	70,000	grains.
1 Pint	= 20 ounces	=	8750	„
1 Ounce	= 8 drachms	=	437·5	„
1 Drachm	= 60 minims	=	54·7	„

The Minim, or drop, is the smallest measure used.

The following Table of Equivalents will be found useful in comparing the strength of the Formulæ of London and Edinburgh with those of the Dublin, and save the trouble of calculation to those Chemists who may not have the Troy weights at hand, and wish to employ the Equivalents in Avoirdupois weights.

WEIGHTS.

LONDON AND EDINBURGH. TROY.			DUBLIN. AVOIRDUPOIS.				
1 lb. or 12	ounces	=	13	ounces	and	73	grains.
11	„	=	12	„	„	30	„
10	„	=	10¾	„	„	97	„
9	„	=	9¾	„	„	54½	„
8	„	=	8¾	„	„	12	„
7	„	=	7½	„	„	79	„
6	„	=	6½	„	„	36½	„
5	„	=	5¼	„	„	103	„
4	„	=	4¼	„	„	61	„
3	„	=	3¼	„	„	18	„
2	„	=	2	„	„	85	„
1	„	=	1	„	„	42½	„

LIST OF THE MATERIA MEDICA

CONTAINED IN THE THREE PHARMACOPŒIAS,

EXCEPTING SUCH PORTIONS OF IT THAT HAVE BEEN TAKEN INTO THE TABULAR ARRANGEMENT FOR COMPARISON.

L. E. **Absinthium.** *Wormwood: flowering herb, dried.* Artemisia Absinthium.

L. E. D. **Acacia.** *Gum Arabic: the gum.* Acacia Vera, and other species.

White or yellowish, transparent or cracked and opaque, brittle, dissolves freely in water.

L. E. **Acetum.** (Britannicum.) *Vinegar: impure Acetic Acid.* Prepared by fermentation from an infusion of Malt.

Brownish; of a peculiar odour; Sp. Gr. 1·019; a fluid ounce is neutralized by a drachm of Crystals of Carbonate of Soda. If after 10 minims of Solution of Chloride of Barium (1 drachm to 1 fluid ounce) have been added to the same quantity, more of the Chloride be poured into the filtered Acid, nothing further is thrown down. The colour is not changed by Hydrosulphuric Acid.—Lond. In 4 fluid ounces, complete precipitation takes place with 30 minims of Solution of Nitrate of Baryta, made by dissolving 40 grains in 800 grains of distilled water.—Edin.

E. D. **Acetum.** (Gallicum.) *French Vinegar.*

L. E. D. **Acidum Aceticum.**

All the Acetic Acids contained in the three Pharmacopœias are here arranged, according to their different strengths.

E.	Acidum Aceticum	Sp. Gr. 1065 = 85 per cent.
D.	,, ,, Glaciale	Sp. Gr. 1065 = 85 per cent.
D.	,, ,, Forte	Sp. Gr. 1066 = 51 per cent.
L.	Acidum Aceticum	Sp. Gr. 1048 = 30·8 per cent.
D.	,, ,, of Commerce	Sp. Gr. 1044 = 28·0 per cent.
E.	,, Pyroligneum	Sp. Gr. 1034 = 21·0 per cent.
L.	,, Aceticum Dilutum	Sp. Gr. 1008 = 4·6 per cent.
L.	Acetum Destillatum	Sp. Gr. 10065 = 4·6 per cent.
D.	Acidum Aceticum Dilutum	Sp. Gr. 1006 = 3·5 per cent.
E.	Acetum Destillatum	Sp. Gr. 1005 = 3·0 per cent.

E. D. ACIDUM MURIATICUM. Hydrochloric or Muriatic Acid of Commerce.

Sp. Gr. at least 1180. It is always yellow, and commonly contains a little Sulphuric Acid, Oxide of Iron, and Chlorine.—Edin.

E. D. ACIDUM NITRICUM. Nitric Acid of Commerce

Sp. Gr. 1380 to 1390; colourless, or nearly so; if diluted with distilled water, it precipitates but slightly or not at all, with Solution of Nitrate of Baryta, or Nitrate of Silver.—Edin.

E. D. ACIDUM PYROLIGNEUM. *Pyroligneous Acid.* Acetic Acid of Commerce. Diluted Acetic Acid, obtained by the destructive distillation of wood.

Sp. Gr. at least 1034, = 21 per cent.—Edin. Sp. Gr. 1044, = 28 per cent.—Dub. Nearly or entirely colourless; unaffected by Sulphuretted Hydrogen or Solution of Nitrate of Baryta; 100 minims neutralize at least 53 grains of Carbonate of Soda.—Edin.

L. E. ACONITUM. *Aconite: the leaves.* Aconitum Napellus.

Glabrous, five partite with wedge-shaped pinnatifid lobes.

L. D. ACONITUM. *Aconite: the root.* Aconitum Napellus.

E. ALLIUM. *Garlic: the bulb.* Allium Sativum.

L. E. ALOE BARBADENSIS. *Barbadoes Aloes: the inspissated juice of the cut leaves.* Aloe Vulgaris.

Opaque; devoid of lustre; of a liver colour, a little tending to black, with a bitter nauseous taste, and very unpleasant odour.—Lond.

L. E. D. ALOE HEPATICA. *Hepatic Aloes: the inspissated juice of the leaves.* Uncertain species of Aloe.

Opaque; of a liver colour, with a bitter taste and unpleasant odour.

L. E. ALOE SOCOTRINA. *Socotrine Aloes: the juice of the cut leaves indurated by air.* Uncertain species of Aloe.

Brittle, bitter, of a reddish-brown colour, and aromatic odour. When in recently broken laminæ, it is translucent.—Lond. Nearly soluble in spirit of the strength of Sherry; very rare.—Edin.

E. ALTHÆA. *Marsh-Mallow: the leaves.* Althæa Officinalis.

L. E. „ „ *the root.* „

L. E. D.	ALUMEN.	*Alum: crystalline.*	Sulphate of Alumina and Potash.
L. E. D.	AMMONIACUM.	*Ammoniac: Gum-resinous exudation, hardened by air.*	Dorema Ammoniacum.
L. E. D.	AMMONIÆ HYDROCHLORAS.	*Sal Ammoniac: crystalline.*	Hydrochlorate of Ammonia.
L. E.	AMYGDALA AMARA.	*Bitter Almonds: the seed.*	Amygdalus Communis. (Var. Amara.)
L. E. D.	AMYGDALA DULCIS.	*Sweet Almonds: the seed.*	Amygdalus Communis. (Var. Dulcis.)

Oblong; more than an inch in length; outwardly of a cinnamon colour, and a sweet pleasant taste.

L.	AMYGDALÆ OLEUM.	*Oil expressed from the seeds.*	Amygdalus Communis. (Var. Dulcis et Amara.)
L. E. D.	AMYLUM.	*Starch: the fæcula of the seed.*	Triticum Vulgare.
L. E.	ANETHUM.	*Dill: the fruit.*	Anethum Graveolens.
L.	ANETHI OLEUM.	*Oil of Dill, distilled from the fruit.*	
E.	ANGELICA.	*Angelica: the root.*	Angelica Archangelica.
L. E. D.	ANISUM.	*Anise: the fruit.*	Pimpinella Anisum.
L.	ANISI OLEUM.	*The Oil, distilled from the fruit.*	
L. E. D.	ANTHEMIS.	*Chamomile: the flowers.*	Anthemis Nobilis.
L.	ANTHEMIDIS OLEUM.	*The Oil, distilled from the flowers.*	

E. D.	Aqua.	*Spring Water.*	

It must be so far free from saline matter as not to possess the quality of hardness, or contain above a 6000th of solid matter.—Edin.

E. D.	Argentum.	*Purified Silver.*	

Entirely soluble in dilute Nitric Acid. This solution gives a white precipitate with Chloride of Sodium in excess, which is entirely soluble in Aqua Ammoniæ, and a fluid which is not affected by Sulphuretted Hydrogen.

L. E.	Armoracia.	*Horse-Radish: the fresh root.*	Cochlearia Armoracia.
L. E. D.	Assafœtida.	*Assafœtida: Gum-resinous exudation.*	Narthex (ferula) Assafœtida.
L.	Atropia.	Vide *Belladonna.*	
L. E. D.	Avena.	*Oats: the seed, freed from the husks.*	Avena Sativa.
L. E. D.	Aurantii Cortex.	*Bitter Orange Peel: the rind of the fruit.*	Citrus (Bigaradia L.) Vulgaris E.

Dry it in the month of February, March, or April.—Lond.

L. E.	Aurantii Floris Aqua.	*Distilled water of the flowers.*	Citrus Bigaradia et Citrus Aurantium.

Nearly colourless; unaffected by Sulphuretted Hydrogen.

D.	Aurantii Fructus.	*Sweet Orange: the fruit.*	Citrus Aurantium.
E. D.	Aurantii Oleum.	*Neroli Oil: Volatile Oil of the flowers.*	Citrus Bigaradia et Citrus Aurantium.
E.	Balsamum Canadense.	*Canada Balsam: fluid resinous exudation.*	Abies Balsamea.
L. E.	Balsamum Peruvianum.	*Peruvian Balsam: Balsam flowing from the incised trunk.*	Uncertain Species of Myrospermum.
L. E. D.	Balsamum Tolutanum.	*Balsam of Tolu: Balsam flowing from the incised trunk, hardened.*	Myrospermum Toluiferum.

E. D. BARYTÆ CARBONAS. *Carbonate of Baryta.* Witherite.

One hundred grains dissolved in an excess of Nitric Acid are not entirely precipitated with 124 grains of Sulphate of Magnesia.—Edin.

E. D. BARYTÆ SULPHAS. *Sulphate of Baryta.* Heavy Spar.

White or flesh-red; heavy; lamellar; brittle.

L. E. D. BELLADONNA. *Belladonna: leaves fresh and dry.*—L. E. *Leaves and root.*—D. Atropa Belladonna.

The leaf is oval, acute, very perfect, glabrous, when bruised smells offensively. (The herb which grows spontaneously in the hedges and uncultivated places, is to be preferred to that which is cultivated in gardens.—Lond.) This kind is very rare.—*Editor*.

From the root of this herb we obtain—

L. ATROPIA. *Atropine: alkali prepared from the root.* Crystals.

White, has the form of a prism, soluble in water and Rectified Spirit. No certain tests are known to indicate the purity of this substance.

L. E. D. BENZOINUM. *Benzoin: concrete balsamic exudation.* Styrax Benzoin.

E. BERGAMOTÆ OLEUM. *Oil of Bergamot: volatile oil of the rind of the fruit.* Citrus Limetta.

L. E. D. BISMUTHUM. *Bismuth.*

(Sp. Gr. 9·8 Lond.) Its powder is entirely soluble in Nitric Acid with the aid of heat, and the solution is colourless or nearly so, and deposits a white powder when much diluted with water.—Edin.

L. E. D. BORAX. *Borax.* Biborate of Soda.

Soluble in boiling water. From this solution when saturated and boiling, Sulphuric Acid throws down crystalline scales of Boracic Acid free from colour.

L. E. D. BUCHU. *Buchu: the leaves.* Barosma Serratifolia.

„ „ „ „ Crenulata.

„ „ „ „ Crenata.

Glabrous, glandular, either linear-lanceolate with small serrations, or ovato oblong-obtuse crenated, or ovate or obovate serrated.

L. E. D.	CAJEPUTI.	*Cajeput: volatile oil of the leaves.*	Melaleuca Minor.
L. E.	CALAMINA PRÆPARATA.	*Native Carbonate of Zinc, burnt and rubbed to a most subtle powder and washed.*	

Almost entirely soluble in dilute Sulphuric Acid, emitting very few or no bubbles of Carbonic Acid. This solution, on the addition of Ammonia or Potash, throws down a precipitate soluble in excess of the precipitant.—LOND.

E.	CALAMUS AROMATICUS.	*Sweet Flag: the Rhizoma.*	Acorus Calamus, (var. vulgaris.)
L. E. D.	CALUMBA.	*Calumba: the root.*	Cocculus Palmatus.
L. E. D.	CALX CHLORINATA.	*Chlorinated Lime.*	Hypochlorite of Lime.

Pale greyish white; dry; 50 grains, are nearly all soluble in 2 fluid ounces of water, forming a solution of the density 1027, and of which 100 measures treated with an excess of Oxalic Acid, give off much Chlorine, and if then boiled and allowed to rest 24 hours, yield a precipitate which occupies nineteen measures of the liquid.—EDIN. It is soluble in dilute Hydrochloric Acid emitting Chlorine.—LOND.

L. E. D.	CAMBOGIA.	*Gamboge: gum-resin.*	Uncertain Species of Garcinia.
L. E. D.	CAMPHORA.	*Camphor: concretion from the wood.*	Camphora Officinarum.
L. E. D.	CANELLA.	*Canella: the bark.*	Canella Alba.
E. D.	CANNA.	*Tous le mois: fecula of the root.*	Canna Edulis.
D.	CANNABIS INDICA.	*Indian Hemp: the extract.*	Cannabis Indica.
L. E. D.	CANTHARIS.	*Blister Beetle.*	Cantharis Vesicatoria.
L. E. D.	CAPSICUM.	*Capsicum: the fruit.*	Capsicum Fastigiatum.

Less than in inch in length, oblongo-cylindrical straight.

E. D.	CARBO ANIMALIS.	*Impure animal charcoal.*	Obtained from Bones.

L. E. D.	CARBO LIGNI.	*Charcoal.*	Obtained from Wood.
L. E. D.	CARDAMOMUM.	*Cardamons: the seeds.*	Elettaria Cardamomum.
L. E. D.	CAROTA.	*Carrot: the fresh roots.*	Daucus Carota, var. Sativa.
L. E. D.	CARUI.	*Caraway: the fruit.*	Carum Carui.
L.	CARUI OLEUM.	*Oil of Caraway: distilled from the fruit.*	
L. E. D.	CARYOPHYLLUM.	*Cloves: the unexpanded flowers.*	Caryophyllus Aromaticus.
L.	CARYOPHYLLI OLEUM.	*Oil of Cloves: distilled from the unexpanded flowers.*	
L. E. D.	CASCARILLA.	*Cascarilla: the bark.*	Croton Eleuteria.
E.	CASSIÆ CORTEX.	*Cassia bark: the bark.*	Cinnamomum Cassia.
E.	CASSIÆ OLEUM.	*The volatile oil distilled from the bark.*	
L. E.	CASSIA.	*Cassia: the pulp of the fruit.*	Cassia Fistula.
L. E. D.	CASTOREUM.	*Castor: the peculiar secretion from the præputial follicles.*	Castor Fiber.
L. E. D.	CATECHU.	*Catechu: extract of the wood.*	Acacia Catechu.

Compact, brittle, of a blackish colour, a bitter taste, and is strongly astringent.

Extract of the kernels.—EDIN.	Areca Catechu.
„ *Extract of the leaves.*	Uncaria Gambir.

Prepared in the form of a cube; porous; reddish in colour; of a bitter taste; powerfully astringent; almost entirely soluble in boiling water. This solution when cool, does not become blue on the addition of Iodide of Potassium and dilute Nitric Acid together. If Ether be added to 100 grains of either variety, cold water ought to dissolve 40 grains of dried Etherial Extract.—LOND.

E.	CENTUARIUM.	*Centuary: the flowering heads.*	Erythræa Centuarium.
L. E. D.	CERA.	*Wax: the prepared comb.*	Apis Mellifica.
L. E. D.	CERA ALBA.	*White Wax: the same bleached.*	
L. D.	CEREVISIÆ FERMENTUM.	*Yeast.*	
L. E. D.	CETACEUM.	*Spermaceti: a concretion prepared from the oily matter of the head.*	Physeter Macrocephalus.
L. E. D.	CETRARIA.	*Iceland Moss.*	Cetraria Islandica.

Chenopodium [illegible]

L. D.	CHIMAPHILA.	*Winter-green: the herb.*	Chimaphila Umbellata.

Chinoidin

E. D.	CHIRETTA.	*Chiretta: the herb and root.*	Agathotes Chirayita.
L. E. D.	CINCHONA FLAVA.	*Yellow Bark: the bark.*	Cinchona Calisaya.

Thick, for the most part with very fine sharp fibres, either flat or curled. This species is ashy or brownish on its outer surface; rugose in its long direction, cleft with deep fissures, either transversely or circularly; it is commonly naked, of a cinnamon-brown colour; it has an intensely bitter taste. One pound of this bark should yield about 3 drachms of Disulphate of Quina by the aid of Sulphuric Acid.

L. E. D.	CINCHONA PALLIDA.	*Pale Bark: the bark.*	Cinchona Condaminea.

Thin, quilled, brown, on its external surface, often covered with lichens, cleft with many fissures, generally transverse, but sometimes in a circular direction; of a cinnamon-brown on its internal surface; in taste astringent and bitter.

L. E. D.	CINCHONA RUBRA.	*Red Bark: the bark.*	Uncertain species of Cinchona.

Thick; either flat or quilled; rough internally, with wrinkles, furrows, and warts; reddish-brown or chesnut colour; of a bitter taste.

E. D.	CINCHONA CINEREA.	*Gray Bark: the bark.*	Cinchona Micrantha.
L. E. D.	CINNAMOMUM.	*Cinnamon: the bark.*	Cinnamomum Zeylanicum.

Thin; much rolled up, the smaller pieces inclosed in the larger ones.

L. E.	Cinnamomi Oleum.	*Oil of Cinnamon: Oil distilled from the bark.*	Cinnamomum Zeylanicum.

Cherry-red when old, wine-yellow when recent; odour purely cinnamomic; Nitric Acid converts it nearly into a uniform crystalline mass.—Edin.

L. E. D.	Coccus.	*Cochineal.*	Coccus Cacti.
E.	Cocculus.	*Cocculus Indicus: the fruit.*	Anamirta Cocculus.

The kernels should fill at least two-thirds of the fruit.

L. E. D.	Colchici Cormus.	*Colchicum: the Corm, fresh and dried.*	Colchicum Autumnale.

Let it be dug up in the month of July, or before the autumnal bud has projected.

The Drying.—The dry coatings having been torn off, cut the corms transversely in thin slices, and dry, at first with a gentle heat, but afterwards slowly increased to the 150th degree.—Lond.

L. E. D.	Colchici Semina.	*Colchicum: the Seeds.*	Colchicum Autumnale.
L. E. D.	Colocynthis.	*Colocynth: the pulp of the fruit.*	Citrullus Colocynthis.
L. E. D.	Conium.	*Hemlock: the leaves; fresh, and dried.*	Conium Maculatum.

The powder triturated with Liquor Potassæ; exhales a powerful odour of Conia.

L. E. D.	Copaiba.	*Copaiva: Oleo-resin, flowing from the incised trunk.*	Capaifera Multijuga, and other species.

Transparent, free of turpentine odour when heated; soluble in two parts of Alcohol: it dissolves a fourth of its weight of Carbonate of Magnesia, with the aid of a gentle heat, and continues translucent.—Edin.

L. E.	Copaibæ Oleum.	*Oil distilled from the Oleo-resin.*	
L. E. D.	Coriandrum.	*Coriander: the fruit.*	Coriandrum Sativum.
L. E.	Cornu.	*Hartshorn: the Horn.*	Cervus Elephus.
L.	Cornu Ustum.	*Phosphate of Lime prepared from Horn by fire.*	
L. E. D.	Creasotum.	*Creasote: an Oxyhydrocarburet, prepared from Pyroxylic Oil.*	

Devoid of colour, and remains so under sunshine, having a peculiar odour; soluble in its own volume of Acetic Acid; when dropped on bibulous paper, and a boiling heat is applied for about ten minutes, it entirely escapes, leaving no transparent stain.—Lond. and Edin.

Sp. Gr. Lond. 1·046. Edin. and Dub. 1.066.

E. D.	CRETA.	*Chalk.*	Friable Carbonate of Lime.
L. E. D.	CROCUS.	*Saffron: the Stigmata.*	Crocus Sativus.

It consists of tripartite filaments of an orange-red colour, the small filaments dilated towards the apex; moistened with water, and rubbed on white paper, it stains it freely of an orange colour.—LOND.

L. E. D.	CROTONIS OLEUM.	*Croton Oil, expressed from the Seed.*	Croton Tiglium.

When agitated with its own volume of pure Alcohol and gently heated, it separates on standing, without having undergone any apparent diminution.—EDIN.

L. E. D.	CUBEBÆ.	*Cubebs: the Immature fruit, with stalk.*—LOND.	Piper Cubeba.
E.	CURCUMA.	*Turmeric: the Rhizoma.*	Curcuma Longa.
L. E.	CUSPARIA.	*Angustura-bark: the Bark.*	Galipea Cusparia?

Nitric Acid neither turns the outer surface *green*, nor the transverse fracture *red*.—EDIN.

L.	CYDONIUM.	*Quince: the seeds.*	Cydonia vulgaris.
L. E.	CYMINUM.	*Cummin: the fruit.*	Cuminum Cyminum.
L. E. D.	DIGITALIS.	*Foxglove: uncultivated, the stem-leaf, fresh and dry.*	Digitalis Purpurea.

Subsessile, or with a short petiole, ovato-lanceolate, or oblong, narrowed at the base; crenate, wrinkled and veined, hairy beneath, or on both sides; let it be gathered before the terminal flowers have expanded.

THE DRYING.—The petiole and mid rib of the leaf being cut off, dry the Lamina.

E. D.	DOLICHOS. (*Vide* MUCUNA.)		
L. E. D.	DULCAMARA.	*Woody Nightshade: the new shoots.*	Solanum Dulcamara.

It is to be collected in autumn devoid of leaves.

L. E. D.	ELEMI.	*Elemi: a terebinthinate concretion.*	An uncertain plant.
L. E. D.	ERGOTA.	*Ergot: the seed, diseased by a Parasitic Fungus.*	Secale Cereale.

E.	EUPHORBIUM.		*Euphorbium: concrete resinous juice.*	Uncertain Species of Euphorbia.
L. E. D.	FARINA.		*Starch: the flour of the seeds.*	Triticum Vulgare.
E. D.	FERRI LIMATURA.		*Iron Filings.*	
L. E.	FERRI SULPHAS.		*Commercial Sulphate of Iron: Crystals.*	Impure Sulphate of Iron.
L. E. D.	FERRUM IN FILA TRACTUM.		*Iron Wire.*	
			Flexible, but not resilient.—LOND.	
L. E. D.	FICUS.		*Fig: the prepared fruit.*	Ficus Carica.
E.	FILIX.		*Male-fern: the Rhizoma.*	Nephrodium Filix Mas.
L. E. D.	FŒNICULUM.		*Fennel: the fruit.*	Fœniculum Dulce.
L.	FŒNICULI OLEUM.		*Oil of Fennel, distilled from the fruit.*	
L. E. D.	GALBANUM.		*Galbanum: Gum-resin.*	Galbanum Officinale.
L. E. D.	GALLÆ.		*Galls, formed by Cynipe Gallæ tinctoriæ on the twigs.*	Quercus Infectoria.
			Bluish-black; heavy; not yet perforated.—LOND.	
L. E. D.	GENTIANA.		*Gentian: the root.*	Gentiana Lutea.
D.	GLYCERINA.	Sp. Gr. 1260.	*Glycerine: a sweet principle.*	Produced during Saponification.
L. E. D.	GLYCYRRHIZA.		*Liquorice: the root fresh and dried.*	Glycyrrhiza Glabra.
			Keep the fresh root buried in dry sand.—LOND.	
E.	GOSSYPIUM.		*Raw Cotton: Hairs attached to the seeds.*	Gossypium Herbaceum and other species.

L. E. D.	GRANATI RADIX.	*Pomegranate Root: the bark of the root.*	Punica Granatum.
L.	GRANATUM.	*Pomegranate: the rind of the fruit.*	
L. E. D.	GUAIACI LIGNUM.	*Guaiacum Wood: the wood.*	Guaiacum Officinale.
L. E. D.	GUAIACUM.	*Resin, prepared from the wood by means of fire.*	

Fresh fracture red, slowly passing to green. The tincture slowly strikes a lively blue colour on the inner surface of a thin pairing of raw potato.—EDIN.

L. E. D.	HÆMATOXYLUM.	*Logwood: the wood.*	Hæmatoxylum Campechianum.
L. E.	HELLEBORUS.	*Hellebore: the Rhizoma and root.*	Helleborus Niger.
D.	HEMIDESMUS.	*Indian Sarsaparilla: the root.*	Hemidesmus Indicus.
L. D.	HIRUDO.	*The Leech.*	Sanguisuga Medicinalis, and S. Officinalis.
L. E. D.	HORDEUM.	*Pearl Barley: the decorticated seeds.*	Hordeum Distichon.
L. E. D.	HYDRARGYRUM.	*Mercury.*	

Sp. Gr. 13·5. By heat it is volatilized; a globule moved along a sheet of paper, leaves no trail.—LOND. Pure Sulphuric Acid, agitated with it, entirely evaporates by heat.—EDIN.

L. E. D.	HYOSCYAMUS.	*Henbane: the fresh and dried leaf.*	Hyoscyamus Niger, the Biennial Herb.

Sissile, oblong, acutely sinuous, subpubesent, with fœtid viscid hairs. Let it be gathered and dried in the manner that has been directed for Digitalis. The plant which grows in places covered with rubbish, and of its own accord by the wayside, is to be preferred to that cultivated in gardens.

L. E. D.	JALAPA.	*Jalap: the tuber.*	Exogonium Purga.
L.	INULA.	*Elecampane: the root.*	Inula Helenium.

L. E. D.	Iodinium.	*Iodine.*	

It is black, has a metallic lustre, and resembles Chlorine in odour. On applying heat to it, first liquefies and then sublimes in a violet coloured vapour. It is soluble in Rectified Spirit. This solution colours Starch, blue; 39 grains of Iodine, with 9 grains of Lime, and 3 oz. of water, dissolved by a gentle heat, turn the solution a yellow or brownish colour, if the Iodine be pure, but colourless if there be above 2 per cent. of water or other impurity.—Lond. and Edin.

L. E. D.	Ipecacuanha.	*Ipecacuan: the root.*	Cephaelis Ipecacuanha.

Ashy-coloured; tortuous; very much cracked, and marked in rings by deep fissures; having an acrid, aromatic bitterish taste.

E. D.	Juniperi Cacumina.	*Juniper: the tops.*	Juniperus Communis.
L. E. D.	Juniperi Fructus.	*Juniper-berries: the fruit.*	
L. E.	Juniperi Oleum.	*Oil of Juniper, distilled from the fruit.*	
L. E. D.	Kino.	*Kino: concrete exudation from the incised bark.*	Pterocarpus Marsupium.
L. E. D.	Krameria.	*Rhatany: the root.*	Krameria Triandria.
E.	Lacmus.	*Litmus: peculiar colouring matter.*	Roccella Tinctoria.
L. D.	Lactuca Sativa.	*Lettuce: the leaves and flowering herb.*	Lactuca Sativa.
D.	Lactuca Virosa.	*Acrid Lettuce: the leaves.*	Lactuca Virosa.
E. D.	Lactucarium.	*Lettuce-Opium: the inspissated juice.*	Lactuca Sativa et Virosa.
E. D.	Lauro-Cerasus.	*Cherry-Laurel: the leaves.*	Prunus Lauro-cerasus.
L.	Laurus.	*Laurel: the fruit.*	Laurus Nobilis.
E. D.	Lavandula.	*Lavender: the flowers.*	Lavandula Vera.
L. E.	Lavandulæ Oleum.	*Oil, distilled from the flowers.*	

D.	Lichen Islandicus.	Vide *Cetraria.*	
L. E. D.	Limones.	*Lemons: the fruit; the juice.*—Lond.	Citrus Limonum.
L. E. D.	Limonum Cortex.	*Lemon-peel: rind of the fruit fresh and dried.*	

Dry it in the Month of April or May.—Lond.

L. E. D.	Limonum Oleum.	*Volatile Oil: expressed from the rind of the fruit.*	
E.	Lini Farina.	*Linseed-meal: Meal of the Seeds deprived of their fixed oil by expression.*	Linum Usitatissimum.
L. E. D.	Lini Oleum.	*Linseed-oil: Oil expressed from the seeds.*	
L. E. D.	Lini Semina.	*Linseed: the seeds.*	
E.	Linum Catharticum.	*Purging Flax: the herb.*	Linum Catharticum.
L. E. D.	Lythargyrum.	Vide *Plumbi Oxydum.*	
D.	Lixivus Cinis.	Vide *Potassæ Carbonas.*	
L. E. D.	Lobelia.	*Indian Tobacco: the flowering herb.*	Lobelia Inflata.
L. E.	Lupulus.	*Hops: the Catkins.*	Humulus Lupulus.
D.	Lupulina.	*Lupulin: the yellow powder separated from the Strobiles, by rubbing and sifting.*	Humulus Lupulus.
L. E. D.	Magnesiæ Sulphas.	*Epsom Salts: crystals.*	Sulphate of Magnesia.

It does not deliquesce in the air; soluble in water. If Sulphuric Acid be poured into this solution, no Hydrochloric Acid is given off.—Lond. Ten grains dissolved in a fluid ounce of water, and treated with solution of Carbonate of Ammonia, are not entirely precipitated by 280 minims of solution of Phosphate of Soda (175 gr. to 8 fl. oz.)—Edin.

E.	Malva.	*Common Mallow: the herb.*	Malva Sylvestris.
L. E. D.	Manganesii, Peroxydum.	*Per oxide of Manganese.*	Binoxide of Manganese.

Muriatic Acid, aided by heat, dissolves it almost entirely, disengaging Chlorine.—Lond. Heat disengages Oxygen.—Edin.

L. E. D.	Manna.	*Manna: the juice flowing from the incised stem, hardened by air.*	Fraxinus Rotundifolia et F. Ornus?
L. E. D.	Maranta.	*Arrowroot: Fecula of the tubers.*	Maranta Arundinacea.
E. D.	Marmor Album.	*White Marble: crystalline.*	Carbonate of Lime.

A neutral solution in Nitric Acid, precipitated by an excess of Oxalate of Ammonia, and filtered, yields no white precipitate with Phosphate of Ammonia.—Edin.

L. E. D.	Mastiche.	*Mastich: Resin flowing from the incised bark.*	Pistacia Lentiscus.
D.	Matico.	*Matico: the leaves.*	Artanthe Elongata.
L. E. D.	Mel.	*Honey: the secretion of flowers deposited in the Honeycomb.*	Apis Mellifica.

Dissolved in water at the temperature of 170 degs., and when cooled, if mixed with Iodide of Potassium and diluted Nitric Acid, it exhibits no blue colour, (therefore Starch is absent.)—Lond.

E.	Melissa.	*Balm: the herb.*	Melissa Officinalis.
L. E. D.	Mentha Piperita.	*Peppermint: the herb, fresh and dried.*	Mentha Piperita.
L. E.	Menthæ Piperitæ Oleum.	*Oil of Peppermint: Oil distilled from the flowering herb.*	
L. E. D.	Mentha Pulegium.	Vide *Pulegium.*	
L. E. D.	Mentha Viridis.	*Spearmint: flowering herb, fresh and dried.*	Mentha Viridis.

L.		D.	MENTHÆ VIRIDIS OLEUM.	*Oil of Spearmint: distilled from the flowering herb.*	
	E.		MENYANTHES.	*Buckbean: leaves.*	Menyanthes Trifoliata.
L.	E.	D.	MEZEREON.	*Mezereon: root-bark.*	Daphne Mezereon.
L.			MORI SUCCUS.	*Mulberry: juice of the fruit.*	Morus Nigra.
L.		D.	MORRHUÆ OLEUM.	*Cod Liver Oil: prepared from the Liver.*	Gadus Morrhua.
L.	E.	D.	MOSCHUS.	*Musk: secretion in the follicle of the prepuce.*	Moschus Moschiferus.
L.	E.	D.	MUCUNA.	*Cowitch: hairs from the pods.*	Mucuna Pruriens.
L.	E.	D.	MYRISTICA.	*Nutmegs: seed, freed from its coverings.*	Myristica Officinalis.
L.	E.		MYRISTICÆ ADEPS.	*Concrete: expressed oil of the seed.*	
	E.		MYRISTICÆ OLEUM.	*Volatile oil from the seed.*	
L.	E.	D.	MYRRHÆ.	*Myrrh: gum-resin, from the bark.*	Balsamodendron Myrrhæ.
L.	E.	D.	NUX VOMICA.	*Koochla, or vomit-nuts: the seed.*	Strychnos Nux Vomica.
L.	E.	D.	OLIVÆ OLEUM.	*Olive Oil: expressed from the fruit.*	Olea Europea.

When carefully mixed with a twelfth of its volume of Solution of Nitrate of Mercury, prepared as for the Unguentum Citrinum, it becomes in three or four hours like a firm fat, without any separation of liquid oil.—EDIN.

L.	E.	D.	OPIUM.	*The juice emitted by the incised unripe fruit, indurated by the air.*	Papaver Somniferum.

A solution from 100 grains of fine Opium macerated 24 hours in 2 fluid ounces of water filtered, and strongly squeezed in a cloth; if treated with a cold solution of half an ounce of Carbonate of Soda in two waters, yields a precipitate, which weighs, when dry, at least 10 grains, and dissolves entirely in a solution of Oxalic Acid.

E.	ORIGANUM.	*Marjoram: the herb.*	Origanum Vulgare.
D.	OSSA.	*Bones.*	Bos Taurus.
L. E. D.	OVUM.	*Egg: both the albumen and the yolk.*	Gallus Bankiva.
L.	PANIS.	*Wheaten Bread.*	Panis Triticea.
L. E. D.	PAPAVER.	*Poppy Capsules: mature,* L. *Unripe,* E. *Dried,* D.	Papaver Somniferum.
L. E. D.	PAREIRA.	*Pareira: dried root.*	Cissampelos Pareira.
L. E.	PETROLEUM.	*Rock Oil: black liquid bitumen flowing from the earth spontaneously.*	
L.	PHOSPHORUS.	*Phosphorus.*	
		Almost free from colour; like wax; translucent; shines in the dark. This ought to be kept in water, preserved from access of light.	
L. E. D.	PIMENTA.	*Pimento: unripe berries.*	Eugenia Pimenta.
L.	PIMENTÆ OLEUM.	*Oil distilled from the fruit.*	
L. E.	PIPER LONGUM.	*Long Pepper: unripe fruit.*	Piper Longum.
L. E. D.	PIPER NIGRUM.	*Black Pepper: unripe fruit.*	Piper Nigrum.
L. E.	PIX. P. ARIDA, Edin.	*Black Pitch: a dry bitumen prepared from tar.*	Pinus Sylvestris.
L. E. D.	PIX BURGUNDICA.	*Burgundy Pitch: impure resin prepared from turpentine.*	Abies Excelsa.
L. E. D.	PIX LIQUIDA.	*Tar prepared from wood by heat.*	Pinus Sylvestris and other Species.

E. D. **Plumbi Carbonas.** *Carbonate of Lead.*

It does not lose weight at a temperature of 212°; 68 grains are entirely dissolved in 150 minims of Acetic Acid (85 *per cent*), diluted with a fluid ounce of Distilled Water, and the solution is not entirely precipitated by a solution of 60 grains of Phosphate of Soda.

L. E. D. **Plumbi Oxidum.** *Litharge.*

Entirely, or almost entirely, soluble in dilute Nitric Acid. This solution becomes black on adding Hydrosulphuric Acid; Potash throws down a white precipitate, which is re-dissolved by adding the same in excess. If Sulphate of Soda be added to 100 grains of this oxide, dissolved in dilute Nitric Acid, 135 grains of Sulphate of Lead are precipitated.—Lond. 50 grains dissolve entirely, without effervescence, in a fluid ounce and a half of Pyroligneous Acid; and the solution, precipitated by 53 grains of Phosphate of Soda, remains precipitable by more of the test.—Edin.

E. **Plumbi Oxidum Rubrum.** *Red Lead: a compound of Protoxide and Peroxide of Lead.*

Entirely soluble in highly fuming Nitrous Acid; partially soluble in diluted Nitric Acid, a brown powder being left.

D. **Potassæ Bichromas.** *Bichromate of Potash.*

L. E. D. **Potassæ Bitartras.** *Cream of Tartar: crystals.*

Sparingly soluble in water. This solution reddens litmus; is converted into Carbonate of Potash by a red heat.

Potassæ Bromid.

E. D. **Potassæ Carbonas Impura.** *Potashes.*

One hundred grains lose not more than 20 grains on exposure to a red heat, and when dissolved and supersaturated by pure dilute Nitric Acid, the solution gives a faint haze only with solution of Nitrate of Baryta, and is entirely precipitated by 100 minims of solution of Nitrate of Silver, (1 gr. in 40 gr.)—Edin.

L. D. **Potassæ Chloras.** *Chlorate of Potash: crystals.*

Soluble in water; nothing is thrown down from this solution by Nitrate of Silver, it fuses by heat; 100 grains at a small red heat, give out nearly 39 grains of Oxygen Gas.—Lond. Care should be taken on powdering this Salt that no organic or combustible matter is mixed with it.

L. E. D. **Potassii Ferrocyanidum.** *Prussiate of Potash.* Ferro-Cyanide of Potassium.

Yellow; soluble in water; this solution is not changed on the addition of any Alkali, or Tincture of Galls; whatever is thrown down by Sulphate of Iron, is first white and then blue; what is thrown down by Sulphate of Copper, is brown, and by Sulphate of Zinc, white; it loses its colour by a gentle heat, and every 100 grains so heated lose 12·6 grains of water. It is altered by a red heat; what remains is soluble in Hydrochloric Acid, and on the addition of Ammonia is again thrown down. From 100 grains 18·7 of Sesqui-oxide of Iron are obtained. Lastly, if the Salt be heated with dilute Sulphuric Acid, Hydrocyanic Acid is given off.—Lond. Not subject to Adulteration.—Edin.

L. E. D.	PRUNUM.	*Prunes: prepared fruit.*	Prunus Domestica.
L. E.	PTEROCARPUS.	*Red Sandal Wood: the wood.*	Pterocarpus Santalinus.
L. E. D.	PULEGIUM.	*Pennyroyal: the flowering herb, fresh and dried.*	Mentha Pulegium.
L.	PULEGII OLEUM.	*Oil distilled from the flowering herb.*	
L. E.	PYRETHRUM.	*Pellitory of Spain: the root.*	Anacyclus *(Anthemis)* Pyrethrum.
E. D.	PYROLA.	*Winter Green.*	*Vide* Chimaphila.
L. E. D.	QUASSIA.	*Quassia: the wood.*	Picræna Excelsa.
L. E. D.	QUERCUS.	*Oak: the bark.*	Quercus Pedunculata.
L. E. D.	RESINA.	*Resin: what remains after Oil of Turpentine has been distilled.*	
L. E.	RHAMNI SUCCUS.	*Buckthorn: the juice of the fruit.*	Rhamnus Catharticus.
D.	RHATANIA.	*Rhatany: the root.*	*Vide* Krameria.
L. E. D.	RHEUM.	*Rhubarb: the root.*	Uncertain species of Rheum.
L. E. D.	RHŒAS.	*Red, or Corn-poppy: the fresh petals.*	Papaver Rhæas
L. E. D.	RICINI OLEUM.	*Castor Oil: expressed Oil from the seeds.*	Ricinus Communis.

It is entirely dissolved by its own volume of Alcohol.—EDIN.

L. E.	ROSA CANINA.	*Hips: the recent fruit.*	Rosa Canina.

L. E. D.	ROSA CENTIFOLIA.	*Damask Rose: the recent petals.*	Rosa Centifolia.
L. E. D.	ROSA GALLICA.	*Red Rose: the unexpanded petals, fresh and dried.*	Rosa Gallica.
E. D.	ROSÆ OLEUM.	*Otto of Roses: the essential oil.*	Rosa Centifolia.
E. D.	ROSMARINUS.	*Rosemary: the tops.*	Rosmarinus Officinalis.
L.	ROSMARINI OLEUM.	*Essential Oil: from the flowering tops.*	
L. E.	RUTA.	*Rue: the Leaves.*—LOND. *and unripe fruit.*—EDIN.	Ruta Graveolens.
L. E.	RUTÆ OLEUM.	*Essential Oil: from the flowering herb.*	
L. E. D.	SABINA.	*Savine: the tops fresh and dried.*	Juniperus Sabina.
L.	SABINÆ OLEUM.	*Oil, distilled from the tops.*	
E. D.	SACCHARUM COMMUNE.	*Brown Sugar: prepared from the juice.*	Saccharum Officinarum.
L. E. D.	SACCHARUM (PURUM.—EDIN. and DUB.)	*Sugar Refined: from the juice of the Stem, crystallized and purified.*	Saccharum Officinarum.
L. E. D.	SACCHARI FÆX.	*Treacle: the impure prepared juice.*	
D.	SACCHARUM LACTIS.	*Sugar of Milk.*	
L.	SAGAPENUM.	*Sagapenum: Gum-resin.*	Uncertain Plant.
L. E. D.	SAGO.	*Sago: the fecula of the Stem.*	Sagus Lævis.—LOND. Cycas Circinalis.—DUB. Various species of Palm and Cycas.—EDIN.

E. **SALICIS CORTEX.** *Willow-bark: the bark.* Salix Caprea.

L. E. **SAMBUCUS.** *Elder: the fresh flowers.* Sambucus Nigra.

L. E. D. **SAPO DURUS.** *Hard Soap: made of Olive Oil and Soda.*

White; it does not stain paper; is free of odour, and dissolves entirely in Rectified Spirit.

L. E. **SAPO MOLLIS.** *Soft Soap: made of Olive Oil and Potash.*

In place of this, the common Soft Soap, prepared from Fish Oil, Suet and Potash, should by no means be used.

L. E. D. **SARSA.** *Sarsaparilla: the root.* Smilax Officinalis.

Reddish; beset very plentifully with little roots; the bark not mealy.

L. E. D. **SASSAFRAS.** *Sassafras: the root.* Sassafras Officinale.

L. E. D. **SCAMMONIUM.** *Scammony: Gum-resin from the cut root.* Convolvulus Scammonia.

Porous; brittle; the freshly broken surface shines. It does not effervesce with Hydrochloric Acid; nor does the powder digested in water at the heat of 170° become blue on the addition of Iodide of Potassium and Nitric Acid together. Out of 100 grains, 78 ought to be soluble in Ether.—Lond. and Edin. It has the odour of good old cheese.—Editor.

L. E. D. **SCILLA.** *Squill: the fresh bulb.* Urginea Scilla.

The Drying.—Dry this just as it is ordered for Colchicum.

L. E. D. **SCOPARIUS.** *Broom: the tops, fresh and dried.* Cytisus Scoparius.

L. E. D. **SENEGA.** *Snakeroot: the root.* Polygala Senega.

L. E. D. **SENNA ALEXANDRINA.** *Alexandrian Senna: the leaf.* Cassia Officinalis? and C. obovata.

Unequal at the base; ovate acute; or obovate mucronate.—Lond. As imported it also contains an abundant admixture of leaves of Cynanchum Argel, which ought to be removed as far as possible by picking.—Edin.

L. E. D. **SENNA INDICA.** *Indian, or, Tinnivelly Senna: the leaf.* Cassia Officinalis.

Unequal at the base; lanceolate.—Lond. Leaves for the most part large, unbroken, and free of brownness or blackening.—Edin.

L. E. D.	Serpentaria.	*Serpentary: the root.*	Aristolochia Serpentaria.
L. E.	Sevum.	*Suet: the prepared fat.*	Ovis Aries.
E. D.	Simaruba.	*Simaruba: the root-bark.*	Simaruba Amara.
L.	Silex Contritus.	*Powdered Flint.*	
L. E. D.	Sinapis.	*Mustard: the seeds.*	Sinapis Nigra and S. Alba.
L. E. D.	Sodii Chloridum (purum.—Edin.)	*Common Salt: crystals.*	

A solution is not precipitated by solution of Carbonate of Ammonia, followed by a solution of Phosphate of Soda, (absence of Lime), a solution of 9 grains in distilled water is not entirely precipitated by a solution of 26 grains of Nitrate of Silver.—Edin.

E.	Spigelia.	*Indian Pink: the root.*	Spigelia Marilandica.
D.	Spiritus Pyroxilicus.	*Pyroxylic Spirit:* Sp. Gr. 846.	
E.	Spongia.	*Sponge.*	Spongia Officinalis.
E. D.	Stannum.	*Tin.*	

When finely granulated, 100 grains are entirely converted into a white powder, by three fluid drachms of Nitric Acid (Sp. Gr. 1380,) and Distilled Water boiled with this powder and filtered, is colourless, and precipitates but faintly, or not at all, with solution of Sulphate of Magnesia (absence of lead).—Edin.

L. E.	Staphisagria.	*Stavesacre: the seeds.*	Delphinium Staphisagria.
L. E.	Stramonium.	*Thorn-apple: the herb.*—Edin.	Datura Stramonium.
L. D.	Stramonii Semen.	*The Seed.*	
L. E.	Styrax.	*Storax: the liquid balsam.*	An Uncertain Plant.
D.	Succini Oleum.	*Oil of Amber: obtained by destructive distillation.*	

L. E. D.	SULPHUR.	*Sulphur-Brimstone, sublimed.*	

It is entirely sublimed by heat; and distilled water agitated with it does not affect Litmus-paper. When Nitric Acid is heated with it, the solution diluted with water, neutralized with Carbonate of Soda, and acidulated with Muriatic Acid, does not give a yellow precipitate with Sulphuretted Hydrogen.—EDIN. Of a lemon colour; sublimes at 600°; soluble in Oil of Turpentine, aided by heat.—LOND.

L.	SULPHUR PRÆCIPITATUM.	*Milk of Sulphur: precipitated from Sulphuret of Calcium by Hydrochloric Acid.*	

Pale yellow; water in which it has been boiled does not change the colour of litmus red, it corresponds with Sulphur in the other characters above mentioned.

L. E. D.	TABACUM.	*Tobacco: the leaf.*	Nicotiana Tabacum.
L. E. D.	TAMARINDUS.	*Tamiarind: the pulp of the fruit.*	Tamarindus Indica.
E. D.	TAPIOCA.	*Tapioca: fecula of the root*	Janipha Manihot.
L. E. D.	TARAXACUM.	*Dandelion: the fresh root.*	Taraxacum Dens-leonis.
L. E.	TEREBINTHINA CHIA	*Chian Turpentine: Oleo-resin, flowing from the incised trunk.*	Pistacia Terebinthus.
E.	TEREBINTHINA VENETA.	*Venice Turpentine: Liquid resinous exudation.*	Abies Larix.
L.	TEREBINTHINA VULGARIS.	*Turpentine: Oleo-resin flowing from the trunk; the bark being taken off.*	Pinus Palustris and Pinus Tæda.
L. E. D.	TEREBINTHINÆ OLEUM	*Oil of Turpentine: distilled Turpentine, rectified.*	
D.	THERIACA.	*Treacle:* Vide *Sacchari fœx.*	
L. D.	THUS.	*Frankincence, exudation from the bark hardened by air.*	Abies Excelsa and Pinus Palustris.

L. E.	TORMENTILLA.	*Tormentilla: the Rhizome.*	Potentilla Tormentilla.
L. E. D.	TRAGACANTHA.	*Tragacanth: Gummy exudation from the bark.*	Astragalus Verus.
L. E. D.	TRITICUM.	Vide *Amylum et Farina.*	
L.	ULMUS.	*Elm: the interior bark.*	Ulmus Campestris.
L. E. D.	UVA.	*Raisin: the prepared fruit.*	Vitis Vinifera.
L. E. D.	UVA URSI.	*Bear-berry: the leaves.*	Arctostaphylos Uva-Ursi.
L. E. D.	VALERIANA.	*Valerian: the root of the wild herb.*	Valeriana Officinalis.
L. E.	VERATRUM.	*White Hellebore: the Rhizome.*	Veratrum Album.
L. E. D.	VINUM XERICUM.	*Sherry Wine.*	
L. E.	VIOLA.	*Violet: fresh petals.*	Viola Odorata.
L. E. D.	ZINCUM.	*Zinc.*	

Sp. Gr. 6·86. Soluble in Nitric Acid; what is thrown from this solution by Ammonia is soluble by an excess of the same.—LOND. It dissolves in a great measure in diluted Sulpuric Acid, leaving only a scanty grayish-black residuum: this solution presents the characters given for the solution of Sulphate of Zinc.

	ZINGIBER.	*Ginger: the Rhizome.*	Zingiber Officinale.

THE

THREE PHARMACOPŒIAS COMPARED

IN A TABULAR FORM.

ACETUM CANTHARIDIS.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		AVOIRDUPOIS WEIGHT.
Cantharides in fine powder 2oz. Acetic Acid - - - fl. 20oz. *(containing* 30 *per cent.)*	Cantharides powdered, - 3oz. Euphorbium, coarsely do. ½oz. Acetic Acid (85 *p. cent.*) fl. 5oz. Pyroligneous Acid - fl. 15oz. *(*21 *per cent.)*	Cantharides in fine powder 4oz. Acetic Acid (51 *p. cent.*) fl. 4oz. Acetic Acid of comm., fl. 16oz. (Sp. Gr. 1·044—28 *per cent.)*
Macerate 8 days, frequently shaking.	Macerate 7 days, strain,	Macerate 14 days,
Press and strain,	Express strongly and filter,	Express through flannel, and filter,
Resulting acid, 30 *per cent.*	*Resulting acid,* 36 *per cent.* 50 *per cent. stronger of flies than London.*	*Resulting Acid,* 33 *per cent.* *Twice the strength of flies to that of London.*

USE.—A Blistering agent, to be rubbed on the part until redness and pain are produced.

ACETUM COLCHICI.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Dried Corms - - - ʒ iiiss. Diluted Acetic Acid, fl. 20oz. *(containing* 4·6 *per cent.)*	*Fresh* Cor.(= ʒ ii ℈ii *dried*) 1oz. Distilled Vinegar - fl. 16oz. *(*3 *per cent.)*	Dried Corms - - - - 1oz. Acetic Acid of comm., fl. 4oz. (Sp. Gr. 1·044—28 *per cent.*) Distilled Water - fl. 12oz.
Macerate 3 days in a covered vessel,	Macerate 3 days,	Macerate 7 days,
Express, filter, and add Proof Spirit, 1½oz.	Express, filter, and add Proof Spirit, 1oz.	Express and filter.
	Same strength as London.	*Three times the strength of Edinburgh and London.*

DOSE.—One drachm and a half to two drachms, London and Edinburgh; 30 to 40 minims, Dublin.

ACETUM DESTILLATUM.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Vinegar (Sp. Gr. 1·019), 1 gal. Distil seven pints, in a sand bath.	Process similar to London, but is afterwards diluted to the proper density.	No process.
A fluid ounce is saturated by 57 grains of Crystallized Carbonate of Soda. Sp. Gr. 10·065.	100 minims is saturated by 8 grains of Crystallized Carbonate of Soda. Sp. Gr. 1·005.	*Vide* Acidum Aceticum Dilutum.
Contains 4·6 *per cent. of real acid.*	*Contains* 3 *per cent. of real acid.*	

TEST.—Colourless; unaltered by Hydrosulphuric Acid.

ACETUM OPII.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		AVOIRDUPOIS WEIGHT.
No Process.	Opium, cut small - - 4oz. Distilled Vinegar - fl. 16oz. *(3 per cent.)*	Opium, in coarse powder, 1½oz. Diluted Acetic Acid, fl. 20oz. *(4 per cent.)*
	Rub the opium with a little of the vinegar to a pulp, and add the rest, Macerate 7 days, Express strongly, and filter.	Macerate 7 days, Express and filter.
	More than three times the strength of Dublin.	*Same strength as Laudanum.*

DOSE.—Four to twelve minims, Edinburgh; 10 to 30 minims, Dublin.

This preparation has been preferred to Tincture of Opium, being less apt to occasion the disagreeable subsequent effects of the drug.

ACETUM SCILLÆ.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Dried Squills bruised - 2½oz. Diluted Acetic Acid, fl. 20oz. *(4·6 per cent.)*	Dried Squills broken - 2½oz. Distilled Vinegar - fl. 20oz. *(3 per cent.)*	Dried Squills bruised - 2oz. Acetic Acid of comm., fl. 4oz. *(28 per cent.)* Distilled Water - - fl. 12oz.
Digest for 3 days with a gentle heat, express, filter, and add Proof Spirit, 1½oz.	Digest 7 days, strain, Express and add Proof Spirit, 1½oz. And filter the whole.	Digest 7 days, strain, Express and filter.
		Quantity of Squills nearly same in all. Dublin acid is twice the strength of Lon. & Edin.

DOSE.—From half a drachm to two drachms.

ACIDUM ACETICUM.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		GLACIALE.
No corresponding strength in Pharm.	Obtained from Dry Acetate of Lead, and Sulphuric Acid. (*Vide* Appendix.) 100 minims neutralize at least 216 grains of Crystallized Carbonate of Soda. Sp. Gr. 1·063 to 1·068. *Contains* 85 *per cent. of real Acid.*	Obtained from Dry Acetate of Lead and Muriatic Acid Gas. (*Vide* Appendix.) Sp. Gr. 1·065. *Contains* 85 *per cent. of real Acid.*
		FORTE.
In the Mat. Med. Acid prepared from wood by means of heat—purified. (No process given.) 100 grains saturate 87 grains of Crystallized Carbonate of Soda. Sp. Gr. 1·048. *Contains* 30·8 *per cent. of real Acid.*	No corresponding strength in Pharm.	Glacial Acetic Acid - fl. 6oz. Distilled Water - - fl. 4oz. Mix. Sp. Gr. 1·066. *Contains* 51 *per cent. of real Acid.*

TEST.—Free from colour, very sharp taste and odour, entirely volatilized by heat; neither Chloride of Barium nor Nitrate of Silver precipitate anything. If plates of Silver are digested in it, and Hydrochloric Acid afterwards added, nothing is thrown down. Neither Hydrosulphuric Acid nor Ammonia, nor Ferrocyanide of Potassium (after the addition of Ammonia) changes its colour. Sp. Gr. no sure guide for the strength, as the density of the strongest Acid may be increased by the addition of 20 per cent. of water.

It will be observed that from distilled Vinegar up to the glacial Acid, there are seven or eight different strengths contained in the three Pharmacopæias, viz. 3. 3·5 4·6 21 28 30 51 and 85 per cent.

ACIDUM ACETICUM CAMPHORATUM.

Not in Pharm.	Camphor - - - - - ½oz. Acetic Acid - - - fl. 6½oz. (85 *per cent.*)	AVOIRDUPOIS WEIGHT. Camphor - - - - - 1oz. Strong Acetic Acid - fl. 10oz. (51 *per cent.*) Rectified Spirit - - - fl. ʒ i.
	Pulverize the Camphor with the aid of a little rectified spirit, and dissolve it in the Acid.	Triturate the Camphor with the Spirit, and then dissolve it in the Acid.
		Stronger of Camphor and weaker of Acid than Edin.

USE.—To stimulate the nostrils in fainting, or for external application.

ACIDUM ACETICUM DILUTUM.

Acetic Acid - - fl. ʒ xxiii. (30·8 *per cent.*)	Not in Pharm.	Acetic Acid of Commerce 1 pt. (28 *per cent.*)
Distilled Water to fill fl. 20oz. Mix.	(Vide *Acetum Destillatum.*)	Distilled Water - - 7 pints. Mix.
A fluid ounce is saturated by 57 grains of Crystallized Carbonate of Soda.		
Sp. Gr. 1·008.		Sp. Gr. 1·006.
Contains 4·6 *per cent. of real Acid.*		*Contains* 3·5 *per cent. of real Acid.*

ACIDUM ARSENIOSUM.

	Arsenicum Album. *Sesqui-oxide of Arsenic.*	*Acid. Arsen. Purum.*
In the Mat. Med.	In the Mat. Med.	Commercial White Oxide of Arsenic re-sublimed.
A Metallic Acid prepared by sublimation.		
(No process given.)	(No process given.)	For Manipulation, *vide* Appendix.

DOSE.—1-16th to 1-8th of a grain; more generally given in solution, as Arsenite of Potash.

TEST.—White or faintly yellow, and for the most part opaque; sometimes when recently broken, more or less translucent; if heated in a glass tube it gives off no odour and sublimes of a white colour, but on cooling it crystallizes in colourless octohedrons: mixed with Charcoal and exposed to heat emits a garlic odour, is reduced to Arsenic, and adheres to the tube, shining like a metal. Arsenious Acid is soluble in boiling water, and deposits on cooling octohedral crystals; from this solution Hydrosulphuric Acid throws down a yellow precipitate; with Ammonia and afterwards Nitrate of Silver a lemon-coloured precipitate; with Potash and Sulphate of Copper a green one. 100 grains dissolved in hot diluted Hydrochloric Acid and allowed to cool, Hydrosulphuric Acid will throw down from it 124 grains of Tersulphuret of Arsenic.

ACIDUM BENZOICUM.

In the Mat. Med. Acid obtained from Benzoin by sublimation. Crystals. (No process given.)	*Benzoin heated gradually in a glass mattrass so as to sublime the Acid; the sublimate is pressed between folds of blotting paper to remove the oil, and resublimed.*	*The Benzoin is placed in an iron pot, and the Acid sublimed into a cylinder of paper.* *Vide* Appendix.

DOSE.—5 to 30 grains alone, or combined with Soda or Ammonia.

TEST.—White, or nearly so; cautiously heated sublimes entirely, exhaling a peculiar odour; sparingly soluble in water; copiously so in Rectified Spirit; dissolves in solutions of Ammonia, Potash, Soda and Lime, from which it is thrown down by Hydrochloric Acid.

ACIDUM CITRICUM.

In the Mat. Med. Acid obtained from Lemon Juice. Crystals. (No process given.)	For the process, *vide* Appendix.	AVOIRDUPOIS WEIGHT. In the Mat. Med. (No process given.)

Remarks.—2¼ *drachms of Citric Acid dissolved in 4 fluid ounces of water is equal in strength to Lemon Juice; it becomes mouldy if long kept. The following quantities are calculated for the convenience of prescribing.*

17 grains of Citric Acid, or ℥ss of Lemon Juice } saturates {
25 grains of Bicarbonate of Potash,
20 grains „ Carbonate of Potash,
20 grains „ Bicarbonate of Soda
35 grains „ Carbonate of Soda.
15 grains „ Sesquicarbonate of Ammonia.

Incompatibles.—Tartrate of Potash, Alkaline Carbonates, Acetates, and Sulphurets.

TEST.—Colourless crystals; when burnt alone or with red oxide of Mercury, leaves no ash, or a mere trace, if it contains no lime: soluble in water and in spirit; whatever is thrown down from its aqueous solution by Acetate of Lead is dissolved by Nitric Acid, if it be free from Sulphuric Acid. A solution in 4 parts of water gives no precipitate with Carbonate of Potash if it contains no Tartaric Acid. 100 grains dissolved in water saturates 205·7 grains of Crystallized Carbonate of Soda; if sparingly added to cold Lime Water it remains clear, but becomes turbid when heated: this is characteristic of Citric Acid.

ACIDUM GALLICUM.

In the Mat. Med. Acid prepared from Galls. Crystals. (No process given.)	Not in Pharm.	*Two methods of preparing this Acid are given; one by exposing moistened Galls to the air for* 6 *weeks, the other by acting on Infusion of Galls with Sulphuric Acid. For process, vide* Appendix.

DOSE.—From 3 to 5 grains dissolved in warm water, or suspended in a mixture by mucilage, to be repeated three times a day, or in urgent cases every hour until the desired effect is produced. Mr. Sampson informs me that he gives 12 grains every five hours, or 1 drachm in the 24 hours, with marked success in Albumenuria, when the urine is of *low* specific gravity.

Incompatibles.—The Persalts of Iron.

TEST.—Colourless crystals, destroyed by fire; dissolves sparingly in cold, but freely in warm water and spirit; not precipitated by solutions of Gelatine, Isinglass, or Albumen, proving the absence of Tannic Acid. A persalt of Iron renders its solution blue-black or ink.

ACIDUM HYDROCHLORICUM.

	Acidum Muriaticum Purum	*Acidum Muriaticum Purum*
In the Mat. Med.	Purified Dry Chloride of Sodium,	Dried Chloride of Sodium 3lbs.
Acid prepared from Chloride of Sodium. (No process given.)	Pure Sulphuric Acid, Water; of each, equal weights.	Oil of Vitriol - - fl. 44oz. Water - - - - fl. 32oz.
100 grains of this acid saturates 132 grains of crystallized Carbonate of Soda.	Dilute the Acid with a third part of the water, pour it on the Salt, contained in a glass retort. Distil with a gentle heat so long as any liquid passes over into a cooled receiver containing the rest of the water.	Dilute the Acid with the Water, and when cool pour it on the salt contained in a gallon flask, and distil the Gas into 44 ounces of distilled Water placed in a well cooled receiver until the liquid measures 3 pints.
Sp. Gr. 1·160.	Sp. Gr. 1·170.	Sp. Gr. 1·176.
Contains 32·2 *per cent. of Hydrochloric Acid Gas.*	*Contains* 34·2 *per cent. of Hydrochloric Acid Gas.*	*Contains* 35·4 *per cent. of Hydrochloric Acid Gas.*

TEST.—If quite pure, free from colour: exposed to air, it emits very acrid white fumes: is entirely volatilized by heat: when diluted with water, neither Chloride of Barium, nor Ammonia, nor Sesquicarbonate of Ammonia, throws down anything: does not act on Gold-leaf, even when boiling, which is shewn by Protochloride of Tin producing no change in the solution: and does not discharge the colour of a solution of Sulphate of Indigo.

ACIDUM HYDROCHLORICUM DILUTUM.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		AVOIRDUPOIS WEIGHT.
	Acid. Muriaticum Dilutum	*Acid. Muriaticum Dilutum.*
Hydrochloric Acid - fl. 5oz. (Sp. Gr. 1·16)	Hydrochloric Acid - fl. 4oz. (Sp. Gr. 1·17.)	Hydrochloric Acid - fl. 4oz (Sp. Gr. 1·176)
Distilled Water - - fl. 15oz.	Distilled Water - - fl. 12oz.	Distilled Water - - fl. 13oz.
Mix.	Mix.	Mix.
A fluid ounce is saturated by 168 grains of crystallized Carbonate of Soda.		
Sp. Gr. 1·043.	Sp. Gr. 1·050.	Sp. Gr. 1·045.
Contains 9 *per cent. of Hydrochloric Acid Gas.*	*Contains* 10·2 *per cent. of Hydrochloric Acid Gas.*	*Contains* 9·35 *per cent. of Hydrochloric Acid Gas.*

DOSE of the three Colleges about the same, viz., 10 to 40 minims, diluted with two ounces or more of water, or other vehicle: when used as a gargle, 1 fl. drachm to 8 fl. ounces of Infusion of Roses.

INCOMPATIBLES.—Salts of Silver and Lead, Alkalis and their Carbonates, also Tartar Emetic. This acid should not be administered immediately after Calomel.

ACIDUM HYDROCYANICUM DILUTUM.

	Acidum Hydrocyanicum.	
Ferrocyanide of Potassium, 2oz.	Ferrocyanide of Potassium, 3oz.	Ferrocyanide of Potassium, 2oz.
Sulphuric Acid - - fl. ℥ vii.	Sulphuric Acid - - fl. 2oz.	Oil of Vitriol - - - fl. 1oz.
Distilled Water - - fl. 30oz.	Water - - - - - - fl. 16oz.	Water - - - - - - fl. 12oz.
Mix the Acid with 4 fl. oz. of the water, and to these, placed in a retort, when they have cooled, add the Ferrocyanide of Potassium, first dissolved in 10 fl. oz. of the water. Pour 8 fl. oz. of water into a cool receiver; then, the retort being fitted on, let 6 fl. oz. of Acid pass into this water distilled with a gentle heat in a sand bath. Lastly, add 6 fl. oz. more of distilled water, or as much as may be sufficient, that 12·59 grains of Nitrate of Silver, dissolved in distilled water, may be accurately saturated by 100 grains of this Acid.	Dissolve the salt in eleven fluid ounces of the water, and put the solution into a mattrass with a little sand: add the acid previously diluted with five fluid ounces of the water, and allowed to cool: connect the mattrass with a proper refrigeratory; distil with a gentle heat by means of a sand bath or naked gas flame till fourteen fluid ounces pass over, or till the residuum begins to froth up. Dilute the product with distilled water till it measures sixteen fluid ounces.	Dissolve the salt in eight ounces of the water, and dilute the Oil of Vitriol with the remaining four ounces. When both solutions are cold, introduce them successively into a retort or mattrass containing several slips of platinum foil, and connected in the usual manner with a Liebig's Condenser; and with the aid of a gentle heat, let eight ounces be distilled over. Finally, dilute the product with eight ounces of distilled water, or so that the volume of the diluted acid shall be sixteen fluid ounces.
The resulting product is 20*oz.*	*The resulting product should measure* 16*oz.*	*The resulting product should measure* 16*oz.*
	100 minims (= 91 grains) should entirely precipitate 22 grains of Nitrate of Silver.	Sp. Gr. 0·997.
Contains 2 *per cent. of real acid.*	*Contains* 3·98 *per cent. of real acid.*	
	Nearly twice the strength of London.	*Rather stronger than London.*

DOSE of the P. L. Acid 2 to 7 minims,—Edin. 1 to 4 minims,—Dublin, 1 to 5 minims; better given in the form of draught than mixture, to ensure equality of dose; often advantageously with Carbonate of Soda: as a lotion, 2 drachms to 8 ounces of *Distilled* Water, or as an ointment, from half a drachm to 1 drachm in an ounce of ointment.

INCOMPATIBLES.—Salts of Silver, Copper, Iron, all Sulphurets and Red Oxide of Mercury.

TEST.—Free from color, entirely volatilized by heat; no precipitate is caused by Nitrate of Baryta; solution of Nitrate of Silver produces a precipitate entirely soluble in boiling Nitric Acid. Litmus is feebly reddened by it, but not permanently. It is not reddened by Iodocyanide of Potassium and Mercury. Hydrosulphuric Acid does not colour it.

ACIDUM NITRICUM PURUM.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Acid prepared from Nitrate of Potash. (No process given.)	Put into a glass retort equal weights of pure Nitrate of Potash and Sulphuric Acid, and distil with a moderate heat from a sand bath into a cool receiver as long as the fused material continues to give off vapour: the pale yellow Acid thus obtained, gently heated in a retort, becomes colourless.	AVOIRDUPOIS WEIGHT. Nitrate of Potash - - 2lbs. Nitrate of Silver - ʒ ii or q. s. Boiling Distilled Water 5 pts. Oil of Vitriol of Commerce, fl. 17oz. Dissolve the Nitrate of Silver in 2oz. and the Nitrate of Potash in the remainder of the water, add by degrees the former solution to the latter until a precipitate ceases to form. The filtered liquid is now evaporated to dryness, placed in a retort, and the Oil of Vitriol poured upon it; the heat is now raised to liquify the contents and to distil over the Acid.
100 grains of this Acid are saturated by 161 grains of Crystallized Carbonate of Soda.		
Sp. Gr. 1·42.	Sp. Gr. 1·50.	Sp. Gr. 1·50.
Contains 60·0 *per cent. of dry Acid.*	*Contains* 79·7 *per cent. of dry Acid.*	*Contains* 79·7 *per cent. of dry Acid.*

TEST.—Free from color; exposed to air emits very acrid fumes; entirely volatilized by heat; when diluted with 3 bulks of water nothing is thrown down by Nitrate of Silver or Chloride of Barium.

ACIDUM NITRICUM DILUTUM.

LONDON.	EDINBURGH.	DUBLIN.
Nitric Acid - - fl. 3oz. (Sp. Gr. 1·42). Distilled Water - - fl. 17oz. Mix. One fluid ounce is saturated by 154 grains of Crystallized Carbonate of Soda.	Pure Nitric Acid - - fl. 1oz. (Sp. Gr. 1·50) Distilled Water - - fl. 9oz. Mix. Or Commercial Nitric Acid, fl. 1oz. and fl. ʒ vss. (Sp. Gr. 1·39). Distilled Water - - fl. 9oz.	Pure Nitric Acid - - fl. 4oz. (Sp. Gr. 1·50). Distilled Water - - fl. 29oz. Mix.
Sp. Gr. 1·082.	Sp. Gr. 1·077.	Sp. Gr. 1·092.
Contains 12 *per cent. of dry acid.*	*Contains* 11·2 *per cent. of dry acid.*	*Contains* 13·5 *per cent. of dry acid.*

DOSE.—From 10 to 40 minims diluted with from 1oz. to 3oz. of simple Rose Infusion. Advantageously substituted for the Sulphuric Acid when Quinine is given, being a solvent for the Tannate of Quinine.

ACIDUM NITRO-MURIATICUM.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Pure Nitric Acid - - fl. 1oz. Pure Muriatic Acid - fl. 2oz. Mix in a green glass bottle, furnished with an accurately ground stopper, and keep in a cool place.

Dr. Scott of India was in the habit of ordering each acid to be diluted with an equal bulk of water prior to mixing: this is a great advantage over the Dublin form, since decomposition of the two acids is avoided, which takes place in a concentrated state. Two fluid ounces of Dr. Scott's form, to a gallon of water, is used for a bath.

ACIDUM PHOSPHORICUM DILUTUM.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Phosphorus - - - - ʒ vi. Nitric Acid - - fl. 4oz. Distilled Water - - fl. 8oz. Mix the Acid and Water in the retort, and add the Phosphorus; apply the heat of a sand bath, and draw over 6oz.; return these again into the retort, that 6oz. may again distil over, which are to be rejected. The contents of the retort are now evaporated in a platinum capsule to 2oz., and when cold, add to it water sufficient to measure 20oz. A fluid ounce is saturated by 132 grains of Crystallized Carbonate of Soda. Sp. Gr. 1·064. *Contains* 10·5 *per cent. of real acid.*	Not in Pharm.	Not in Pharm.

This Acid is still retained by the London College, as it possesses the tonic properties of Sulphuric Acid, and is preferable to it in point of flavour.

DOSE.—20 minims to 1 fluid drachm properly diluted.

TEST.—Free from color and odour; nothing is thrown down by Chloride of Barium or Nitrate of Silver, shewing the absence of Sulphuric and Hydrochloric Acids. Plates of copper or silver immersed in it are not acted upon, shewing the absence of Nitric Acid. Hydrosulphuric Acid produces no change in it, either before or after the plates have been immersed, shewing that no Arsenic was present before the immersion, and that the plates had not been acted upon. When neutralized with Carbonate of Soda, no precipitate occurs if Phosphate of Lime or Phosphates insoluble in water are absent.

ACIDUM SULPHURICUM.

	Acid. Sulph. Purum.	*Acid. Sulph. Purum.*
In the Mat. Med. Acid prepared from Sulphur. 100 grains is saturated by 285 grains of Crystallized Carbonate of Soda.	A process. (*Vide* Appendix.)	A process. (*Vide* Appendix.)
Sp. Gr. 1·843.	Sp. Gr. 1·845.	Sp. Gr. 1·846.

TEST.—Inodorous; and if organic matter is absent, free from color; when solution of Sulphate of Iron is poured on it, there is no reddening at the line of contact, shewing the absence of Nitrous Acid. Diluted with an equal bulk of water, a scanty white precipitate usually occurs if it contains Lead: when diluted with 12 parts of water, and Hydrosulphuric Acid passed through it, a yellow precipitate occurs if Arsenic is present.

ACIDUM SULPHURICUM AROMATICUM.

Not in Pharm.	Commercial Sulphuric Acid, fl. 3½oz. (Sp. Gr. 1·840.)	Pure Sulphuric Acid, fl. 3½oz. (Sp. Gr. 1·846.)
	Rectified Spirit - - 1½ pint.	Rectified Spirit - - 1½ pint.
	Cinnamon (coarsely powdered) 1½oz.	Cinnamon (bruised) - 1½oz.
	Ginger (coarsely powdered) 1oz.	Ginger (bruised) - - 1oz.
	Add the Acid gradually to the Spirit; let the mixture digest at a very gentle heat for three days in a closed vessel; mix the powders, moisten them with a little of the	Upon the Spirit, placed in a stoppered bottle, pour the Acid gradually, and shake so as to produce a uniform mixture. Then add the Cinnamon and Ginger, and

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
Not in Pharm.	Acid Spirit, let the mass rest for twelve hours, put it into a percolator, and transmit the rest of the Acid Spirit. This preparation may also be made by digesting the powders for six days in the Acid Spirit, and then straining the liquor.	macerate for a week, with occasional agitation. Lastly, filter through paper, and preserve in a well stopped bottle. Sp. Gr. 974. *Same strength as Edin.*

DOSE.—From 20 to 30 minims in a wine glass full of water.

ACIDUM SULPHURICUM DILUTUM.

LONDON.	EDINBURGH.	DUBLIN.
Sulphuric Acid - - fl. ʒ xv.	Sulphuric Acid - - fl. 1oz.	Pure Sulphuric Acid - fl. 1oz.
Distilled Water - - fl. 20oz.	Distilled Water - - fl. 13oz.	Distilled Water - - fl. 13oz.
Add by degrees the Acid to half pint of the water, then pour in the remainder until it accurately measures a pint.	Mix.	Mix.
Sp. Gr. 1·103.	Sp. Gr. about 1·090.	Sp. Gr. 1·084.
One fluid ounce is saturated by 216 grains of Crystallized Carbonate of Soda.		
Contains 12¼ *per cent. of dry acid.*	*Contains* 11 *per cent. of dry acid,*	*Contains nearly* 10⅓ *per cent. of dry acid.*

It will be seen that the London is the stronger, and the Dublin the weaker of the three. The Edinburgh and Dublin would at first sight seem to be alike, but the difference arises from the strength of the pure acids employed.

DOSE.—10 to 30 minims in 2 or 3 ounces of water, or other vehicle.

ACIDUM TANNICUM.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Acid obtained from Galls. (No process given.)	Not in Pharm.	Galls (coarsely powdered) 8oz. Sulphuric Ether - - 3 pints. Distilled Water - - - 5oz. Incorporate the Water and Ether by agitation, and pour the resulting solution in successive portions upon the galls previously introduced into a glass or porcelain percolator. The liquid which accumulates in the lower bottle will consist of two distinct strata, the heavier of which is to be separated and evaporated to dryness; finally applying an oven heat, which, however, should not exceed 212°. From the lighter liquid the Ether may be recovered by distilling it by means of a water bath, and with the aid of a Liebig's Condenser.

DOSE.—1 or 2 grains either in pill or solution: when used as a gargle or injection, 5 grains to 8 grains in 1 fluid ounce of water.

Incompatibles.—Mineral Acids, Alkalis, Salts of Lead, Silver, Iron, Antimony, the Vegetable Alkaloids, Gelatine, and Emulsions.

TEST.—Almost colorless, inodorous; readily dissolves in water, and is powerfully astringent, but not bitter. It is characteristic of the Acid to throw down a white clotty precipitate (Tannate of Gelatine) from a solution of Isinglass. In other respects its properties correspond with those of Gallic Acid. Tannic Acid is entirely converted into Gallic Acid by the action of air.

ACIDUM TARTARICUM.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Acid prepared from Bitartrate of Potash. Crystals. (No process given.) 100 grains dissolved in water are saturated by 192 grains of Crystallized Carbonate of Soda.	A process. (*Vide* Appendix.)	AVOIRDUPOIS WEIGHT. In the Mat. Med. (No process given.)

TEST.—Colourless Crystals, leave no residue or a mere trace, when burnt either alone or with red oxide of Mercury, indicating the absence of Lime. Soluble in Alcohol and in water, from which solution Bitartrate of Potash is thrown down by any neutral Salt of Potash, but nothing by Chloride of Barium; whatever Acetate of Lead throws down is again dissolved by Nitric Acid, shewing the absence of Sulphuric Acid.

ADEPS PRÆPARATUS.

	Axungia.	
In the Mat. Med. Prepared Hog's Lard. (No process.) That preserved with Chloride of Sodium is not to be used.	In the Mat. Med. Fat of Sus. Scrofa.	Lard of Commerce, any convenient quantity: melt it in twice its weight of boiling water, stirring the mixture constantly; then set the mixture aside to cool, and separate the lard when it has solidified.

TEST.—One ounce of Hog's Lard melted with two ounces of boiling distilled water, and allowed to cool; the water on separation ought not to precipitate Nitrate of Silver.

ÆTHER.

	Æther Sulphuricus.	*Æther Sulphuricus.*
In the Mat. Med. Ether prepared from Alcohol by the aid of Sulphuric Acid. (No process given.)	A process. (*Vide* Appendix.)	A process. (*Vide* Appendix.)

TEST.—A colourless liquid; entirely evaporates in the air. Litmus is scarcely reddened by it. Sp. Gr. does not exceed ·750 (L.) ·735 (E.) Half a pint of water is required to dissolve one ounce of Ether, and the solution should be clear. When agitated in a minim measure with half its volume of concentrated solution of Muriate of Lime, its volume is not lessened. When washed with water, a mutual solution takes place; 9 parts of Ether take up one of water, and water takes up one-tenth of Ether; concentrated solution of Muriate of Lime detects the water by diminishing the volume of Ether acted upon.

ALCOHOL.

Not in Pharm.	Rectified Spirit - - 1 pint. Lime - - - - - - - 18oz.	Stronger Spirit - - 1 pint. Pulverized fresh burned Lime, 10oz.
	Break down the Lime into small fragments; expose the Spirit and Lime together to a gentle heat in a glass mattrass till the Lime begins to slake: withdraw the heat till the slaking is finished, preserving the upper part of the mattrass cool with damp cloths. Then attach a proper refrigeratory, and with a gradually increasing heat distil off 17 fluid ounces. The density of this Alcohol	Having introduced the Lime and Spirit into a mattrass, connected in the usual manner with a Liebig's Condenser, let heat be applied until the Lime begins to slake, and when this process is completed, distil by means of a Chloride of Zinc bath until the liquid which comes over, together with that obtained during the slaking, measures 2 ounces. This being rejected, the receiver

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
Not in Pharm.	should not exceed ·796. If higher, the distillation must have been begun before the slaking of the Lime was finished.	should be changed, and the distillation resumed, and continued until a product of nearly 16 ounces is procured. Sp. Gr. ·795.

TEST.—Density, ·794—6; when mixed with a little solution of Nitrate of Silver and exposed to bright light, it remains unchanged, or only a very scanty dark precipitate forms; shewing the absence of Formic and Acetic Acids, as also organic matter in solution.

ALCOHOL AMYLICUM.

		Fusel Oil.
Not in Pharm.	Not in Pharm.	For process, *vide* Appendix.

Remarks.—The process for purifying this Oil has been introduced that it may be employed for preparing the Valerianate of Soda.

ALUMEN EXSICCATUM.

Alum - - - - - - 1 lb. Liquefy over a fire, then increase the heat till ebullition shall have ceased.	Any convenient quantity of Alum; fuse it over the fire in a vessel of iron or earthenware; continue the heat till ebullition ceases and vapour is no longer discharged, and then reduce it to powder.	Alum any convenient quantity; liquefy it in a porcelain capsule over a gas lamp or open fire, and continue the heat until vapour ceases to be disengaged. Let the residue be then reduced to a fine powder, and preserved in a well stopped bottle.

Remark.—For external use only.

AMMONIACUM PRÆPARATUM.

Ammoniacum, - - - 1 lb. Water, enough to cover it. Boil the Ammoniacum with the water until they are mixed, strain the mixture through a hair sieve, and evaporate in a water bath, constantly stirring, so that on cooling it becomes hard.	Not in Pharm.	Not in Pharm.

AMMONIÆ BICARBONAS.

Not in Pharm.	Not in Pharm.	Commercial Sesquicarbonate of Ammonia, any convenient quantity. Reduce it to a fine powder, and having spread it on a sheet of paper, expose it to the air for twenty-four hours. Let it be now enclosed in a well stopped bottle.

This is an excellent antacid, being less stimulating and caustic than the Sesquicarbonate; it is more agreeable to the taste.

DOSE.—From 5 to 25 grains in water or bitter infusions.

AMMONIÆ CARBONAS.

Vide Ammoniæ Sesquicarbonas.

AMMONIÆ HYDROSULPHURETUM.

Not in Pharm.	Not in Pharm.	For process, *vide* Appendix.

This preparation was given internally as a de-oxygenising agent in Diabetes, in doses of 4 minims to 6 minims in water, but is now chiefly used as a test.

AMMONIÆ SESQUICARBONAS.

AVOIRDUPOIS WEIGHT.

LONDON.	EDINBURGH.	DUBLIN.
	Ammoniæ Carbonas.	
	Sal-Ammoniac - - - 1lb. Chalk . - - - - - - 1½lb.	
In the Mat. Med. Crystallized. (No process given.)	Reduce them separately to fine powder, mix them thoroughly, and subject the mixture in a retort with a proper receiver to a gradually increasing heat so long as any vapours sublime.	In the Mat. Med. (No process given.)

DOSE.—From 5 to 15 grains in solution every four or six hours, as an antacid, stimulant, and sudorific.

TEST.—Colourless, translucent; has a pungent odour and taste; changes the colour of Turmeric to brown; heat sublimes it entirely; a solution in water, when treated with Nitric Acid in excess, does not precipitate with solution of Nitrate of Baryta or Nitrate of Silver.

ANTIMONII OXYSULPHURETUM.

LONDON.	EDINBURGH.	DUBLIN.
	Antim. Sulphuretum Aureum.	*Antim. Sulphuretum Precipitatum.*
Tersulphuret of Antimony, in powder, 7oz. Solution of (Caustic) Soda, 4 pints. Distilled Water - 2 gallons. Dilute Sulphuric Acid, as much as may be necessary.	Sulphuret of Antimony, in fine powder, 1oz. Solution of Potash - 11 fl. oz. Water - - - - - - 2 pints.	Prepared Sulphuret of Antimony, 5oz. Carbonate of Potash, from Pearlash, first dried by a low red heat, and reduced to powder, 4oz. Water - - - - - 1 gallon. Pure Sulphuric Acid - 2 fl. oz. Distilled Water - - 1 quart.
Mix the Tersulphuret and Soda with the water, and boil with a gentle fire for two hours, occasionally stirring, distilled water being often added to supply the loss by evaporation; strain the liquor, and add to it by degrees as much acid as is sufficient to throw down the Oxysulphuret; then wash out the Sulphate of Soda, and dry what remains with a gentle heat.	Mix the water and Solution of Potash, add the Sulphuret, boil for an hour, filter immediately, and precipitate the liquid while hot with an excess of diluted Sulphuric Acid. Collect the precipitate on a calico filter, wash it thoroughly with water, and dry it with a gentle heat.	Mix the Sulphuret and Carbonate of Potash well together, heat cautiously till effervescence ceases in a Hessian crucible, and then to redness till liquified; allow the mass to cool, then powder it, and add it in successive portions to the gallon of water boiling; continue boiling for twenty minutes, then filter and let it drop into the distilled water previously mixed with the Sulphuric Acid, collect the precipitate, wash it repeatedly with warm water till the washings are unaffected by Nitrate of Barytes; lastly, dry it on porous bricks in a warm atmosphere.

DOSE.—One to three grains as an alterative.

This preparation is rarely given alone, it is only employed in the Plummers Pill.

TEST.—Tasteless; of a golden red colour; wholly soluble in boiling solution of Potash, and almost so in twelve times its weight of hot Hydrochloric Acid, Hydrosulphuric Acid being disengaged, and a small quantity of Sulphur left. These solutions are colourless.

ANTIMONII OXIDUM.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Sulphuret of Antimony, in fine powder, 4oz. Muriatic Acid (Commercial), 1 pint. Water - - - - - 5 pints. Dissolve the Sulphuret in the Acid with the aid of a gentle heat, boil for half an hour, filter, pour the fluid into the water, collect the precipitate on a calico filter, wash it well with cold water, then with a weak solution of Carbonate of Soda, and again with cold water till the water ceases to affect reddened litmus paper. Dry the powder over the vapour bath.	AVOIRDUPOIS WEIGHT. Solution of Terchloride of Antimony, 16 fl. oz. Water - - - - 2 gallons. Solution Caustic Potash, 1 pint. Distilled Water, a sufficient quantity. Pour the Antimonial solution into the water; agitate well, and let it subside; decant the water, and wash the oxide with a gallon of distilled water; collect it on a filter, and pass water through it until it very slightly reddens litmus. Agitate the precipitate occasionally for half an hour with the solution of Potash, collect it on a filter, and wash with boiling distilled water till the washings do not affect an acid solution of Nitrate of Silver. Lastly, dry the product at a heat not exceeding 120°.

DOSE.—From 3 to 10 grains in a pill, with Conserve of Roses as a diaphoretic.

TEST.—Snow white; fusible at a full red heat; entirely soluble in Muriatic Acid, and also in a boiling mixture of water and Bitartrate of Potash, if free from Antimonious Acid.

ANTIMONII POTASSIO-TARTRAS.

	Antimonium Tartarizatum	*Antimonium Tartarizatum*
Tersulphuret of Antimony, in very fine powder - - 1lb. Sulphuric Acid - - 15 fl. oz. Bitartrate of Potash - 10oz. Distilled Water - - 5 pints. Mix the Tersulphuret with the acid in an iron vessel. These being stirred with an iron rod, gently apply heat under a chimney. Then increase the fire until the flame of the ignited Sulphur being extinct, nothing is left but a whitish pulverulent mass. When cool, wash it with water till wholly freed from acid, and dry it. Accurately mix nine ounces of this with the Bitartrate of Potash, and boil in the water for half an hour. Filter the liquor whilst hot, and put it aside to crystallize. Separate the	Sulphuret of Antimony, in fine powder - - - - - 4oz. Muriatic Acid - - - 1 pint (Commercial). Water - - - - - 5 pints. Dissolve the Sulphuret in the acid with the aid of a gentle heat; boil for half an hour; filter; pour the liquid into the water; collect the precipitate on a calico filter, wash it with cold water till the water ceases to redden litmus paper; dry the precipitate over the vapour bath: take of This precipitate - - - 3oz. Bitartrate of Potash 4oz. and 2 drachms. Water - - - - - 27 fl. oz. Mix the powders, add the water, boil for an hour, filter, and set the liquid aside	Oxide of Antimony - 5oz. White Bitartrate of Potash 6oz. Distilled Water - - 1 quart. Rub the Bitartrate to fine powder, mix it with the oxide of Antimony, and add water to form a paste, which set by for 24 hours. Pour on this the remainder of the water whilst boiling, and boil for 15 minutes with repeated stirring in a glass or porcelain vessel; filter through calico, and put the *clear* liquid aside to crystallize; after twelve hours decant from the crystals, and boil the liquor down to one-third; when on cooling, an additional product will be obtained. Preserve the salt

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Crystals and dry them; then evaporate the remaining liquid till it crystallizes.	to crystallize. The mother liquor when concentrated yields more crystals, but not so free of colour, and therefore requiring a second crystallization.	in a bottle, after being dried upon blotting paper, without the application of heat.

DOSE.—From one-twelfth to one-sixth of a grain as a diaphoretic and expectorant, in Almond Emulsion or Distilled Water, frequently repeated. A grain to 2 grains for an emetic.

Incompatibles.—Gallic and Tannic Acids.

TEST.—Colourless crystals, entirely soluble in 20 parts of cold water, insoluble in Alcohol; its solution is not affected by solution of Ferrocyanide of Potassium (absence of Iron). Hydrosulphuric Acid passed into its solution throws down a brick-red precipitate (Sulphuret of Antimony). Its diluted solution is unaffected by Chloride of Barium or Nitrate of Silver, proving the absence of Sulphates and Chlorides. Nitric Acid gives a precipitate in its solution which redissolves in an excess of the acid. From a solution containing 100 grains, Hydrosulphuric Acid throws down 49 grains of Tersulphuret of Antimony. A solution in 40 parts of water is not affected by its own volume of a solution of 8 parts of Acetate of Lead in 32 parts of water and 15 parts of Acetic Acid (85 per cent.), proving that no more Tartaric Acid is contained in the salt than its constitution requires.

ANTIMONII SULPHURETUM.

Antimonii Tersulphuretum *olim* ——— *Sesquisulphuretum.*	*Native Sesquisulphuret of Antimony.*	*Antimonii Sulphuretum Præparatum.*
In the Mat. Med.	In the Mat. Med.	Powdered and sifted, Sulpuret of Antimony of Commerce prepared as is Cretæ Præparata, which see.

Rarely prescribed, chiefly used in the preparation of Officinal Antimonials.

TEST.—Entirely soluble in hot Hydrochloric Acid.

AQUA AMMONIÆ CARBONATIS.

Vide Liquor Ammoniæ Sesquicarbonatis.

The Author has found by experience that the following Medicated Waters are better prepared from the fruit, bark, flowers, &c., of the Plant, than from the Essential Oils; he has also observed that they keep better without the addition of Spirit.

AQUA ANETHI.

Dill Seed (bruised) - - 18oz. Water - - - - 2 gallons. Distil - - - - 1 gallon. or Oil of Dill - - - - ʒ ii. fl. Powdered Flint - - - ʒ ii. Distilled Water - - 1 gallon. First well triturate the Oil with the flint, then with the water, and filter through paper.	Anethum Seeds (bruised), 18oz. Water - - - - 2 gallons. Rectified Spirit - - 3 fl. oz. Mix together, and distil off one gallon.	Not in Pharm.

AQUA ANISI.

Not in Pharm.	Not in Pharm.	Essence of Anise - - 1 fl. oz. Distilled Water - - ½ gallon. Mix with agitation, and filter through paper.

AQUA CARUI.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Prepared in the same manner as Aqua Anethi.	Not in Pharm.	Essence of Caraway - 1 fl. oz. Distilled Water - - ½ gallon. Mix with agitation, and filter through paper.

AQUA CASSIÆ.

Not in Pharm.	Cassia Bark, bruised - 18oz. Water - - - - 2 gallons. Rectified Spirit - - 3 fl. oz. Mix them together, and distil off one gallon.	Not in Pharm.

AQUA CHLORINII.

Vide Liquor Chlorinii.

AQUA CINNAMOMI.

Prepared in the same manner as Aqua Anethi.	To be prepared with Cinnamon, in the same way as Aqua Cassia.	Essence of Cinnamon - 1 fl. oz. Distilled Water - ½ gallon. Mix with agitation, and filter through paper.

AQUA DESTILLATA.

In the Mat. Med. (No process.)	Take any convenient quantity of spring water; distil it from a proper vessel, rejecting the first twentieth part, and preserving the first half of the remainder.	Spring Water or River Water any convenient quantity. Having introduced it into a copper still, connected with a block tin worm, or a Liebig's Condenser, draw over about one-fortieth by distillation; this being rejected, continue the process until only about one-fifth of the original volume of the water remains in the still. Let the distilled water be preserved in well stopped bottles.

TEST.—Free of colour and odour; if it remains unaltered on the addition of Lime Water, Chloride of Barium, Nitrate of Silver, Oxalate of Ammonia, or Hydrosulphuric Acid, the absence of Carbonic Acid, Sulphates, Chlorides, Organic Matter, Lime, and Metallic Impregnation, is shewn.

AQUA FŒNICULI.

Not in Pharm.	Prepared with Fennel in the same way as Aqua Anethi.	Essence of Fennel - 1 fl. oz. Distilled water - - ½ gallon. Mix with agitation, and filter through paper.

AQUA LAURO-CERASI.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Fresh leaves of Cherry Laurel, 1 lb. Water - - - - - 2½ pints. Compound Spirit of Lavender, 1oz. Chop down the leaves, mix them with the water, distil off one pint, agitate the distilled liquid well, filter it if any milkiness remain after a few seconds of rest, and then add the Lavender Spirit.	AVOIRDUPOIS WEIGHT. Fresh leaves of the Common Laurel, 1 lb. Water - - - - - 2½ pints. Upon the leaves, chopped, and crushed in a mortar, macerate the water for twenty-four hours, and then draw over a pint of liquid by distillation, using a Liebig's Condenser, and Chloride of Zinc Bath. Filter the product through paper, and preserve it in a well stopped bottle.

The dose of Aqua Lauro-Cerasi is not well fixed, but is usually held to be from 10 to 20 minims. The Edin. will have a reddish colour due to the Compound Spirit of Lavender.

AQUA MENTHÆ PIPERITÆ.

Peppermint, dried - - 2lb. Water - - - - 2 gallons. Distil - - - - 1 gallon. If the fresh herb be employed, double the quantity must be used. This water may be more quickly prepared with the Oil, in the same way as Aqua Anethi.	This Distilled Water is prepared as Aqua Menthæ Viridis.	Essence of Peppermint, 1 fl. oz. Distilled Water - - ½ gallon. Mix with agitation, and filter through paper.

AQUA MENTHÆ PULEGII.

Vide Aqua Pulegii.

AQUA MENTHÆ VIRIDIS.

Prepared in the same manner as Aq. Menthæ Piperitæ.	Spearmint, if fresh - - 4lb. if dry - - 2lb. Water - - - - 2 gallons. Rectified Spirit - - 3 fl. oz. Mix them, and distil off one gallon.	Essence of Spearmint 1 fl. oz. Distilled Water - - ½ gallon. Mix with agitation, and filter through paper.

AQUA PIMENTÆ.

Pimenta, bruised - - 1 lb. Water - - - - 2 gallons. Distil - - - - - 1 gallon. This water may be more quickly prepared with the Oil, in the same way as Aqua Anethi.	Pimento, bruised - - - 1 lb. Water - - - - 2 gallons. Rectified Spirit - - 3 fl. oz. Mix them, and distil off one gallon.	Essence of Pimenta - 1 fl. oz. Distilled Water - - ½ gallon. Mix with agitation, and filter through paper.

AQUA POTASSÆ.

Vide Liquor Potassæ.

AQUA POTASSÆ EFFERVESCENS.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Bicarbonate of Potash - ℥ i. Distilled Water - - 1 pint. Dissolve the salt in the water, and transmit through the solution Carbonic Acid Gas under strong pressure.	AVOIRDUPOIS WEIGHT. Not in Pharm.

AQUA PULEGII.

This water is prepared in the same manner as Aq. Menth. Piperitæ.	Prepared like Aqua Menthæ Viridis.	*Aqua Menthæ Pulegii.* Essence of Pennyroyal, 1 fl. oz. Distilled Water - - ½ gallon. Mix with agitation, and filter through paper.

AQUA ROSÆ.

Centifolia, or Damask Roses, 10lb. Water - - - - 2 gallons. Distil - - - - - 1 gallon.	Petals of Rosa Centifolia, 10lb. Water - - - - 2 gallons. Rectified Spirit - - 3 fl. oz. Mix them, and distil off one gallon. The petals should be preferred when fresh; but it also answers well to use those which have been preserved, by beating them with twice their weight of Muriate of Soda.	Essential Oil of Roses, 20 minims. Distilled Water - - ½ gallon. Mix with agitation, and filter through paper.

That distilled from fresh rose petals keeps best, and has the finest odour; the pickled roses may be taken next in preference.

AQUA SAMBUCI.

Elder Flowers - - - 10lb. Water - - - - 2 gallons. Distil - - - - - 1 gallon.	Elder Flowers, fresh - 10lb. Water - - - - 2 gallons. Rectified Spirit - - 3 fl. oz. Mix them, and distil off one gallon.	Not in Pharm.

There is always a large quantity of vegetable matter in this water, which causes it to grow acid, and impairs its odour; in practice we find it is better when distilled double strength, and diluted as required.

AQUA SODÆ EFFERVESCENS.

Not in Pharm.	Bicarbonate of Soda - - ℥ i. Water - - - - - 1 pint. Dissolve the Bicarbonate in the water, and saturate it with Carbonic Acid under strong pressure. Preserve the liquid in well closed vessels.	Not in Pharm.

ARGENTI NITRAS.

In the Mat. Med. Nitrate of Silver, fused.	Pure Silver - - - - 1½oz. Pure Nitric Acid - - 1 fl. oz. Distilled Water - - 2 fl. oz. Mix the acid and water, add the silver, and dissolve it with the aid of a gentle heat;	*Fusum.* Refined Silver - - - 3oz. Pure Nitric Acid - - 2 fl. oz. Distilled Water - - - 5oz. Place the silver in a flask, and, having poured upon it the acid and water, apply a

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
	increase the heat gradually till a dry salt be obtained; fuse the salt in an earthenware or porcelain crucible, and pour the fused matter into iron moulds previously heated and greased slightly with tallow. Preserve the product in glass vessels.	gentle heat until the metal is dissolved. Transfer the solution to a porcelain capsule, decanting it off a heavy black powder which appears at the bottom of the flask, and having evaporated it to dryness, raise the heat (in a dark room) until liquefaction is produced. Pour the melted Nitrate of Silver into a brass mould furnished with cylindric cavities of the size of a goose quill, and which admits of being opened by a hinge, and when the salt has concreted, remove it, and preserve it in well stopped bottles, rendered impervious to light.

DOSE.—From one-sixth of a grain (gradually increased) to 3 or 4 grains three times a day; for an injection 2 to 10 grains dissolved in an ounce of water; 2 scruples to 1 drachm in an ounce of water for applying to relaxed uvula or tonsils.

TEST.—White; soluble in distilled water with the exception of a very scanty black powder; Copper immersed into this solution precipitates the Silver. If to 6 grains of Chloride of Sodium in solution be added 17 grains of Nitrate of Silver in solution, a further addition of the Nitrate ought to precipitate nothing more in the filtered liquor.—LOND. To be kept excluded from light. Twenty-nine grains dissolved in one fluid ounce of Distilled Water, acidulated with Nitric Acid, precipitated with a solution of 9 grains of Muriate of Ammonia, briskly agitated for a few seconds, and then allowed to rest a little, will yield a clear supernatant liquid, which still precipitates with more of the test.—EDIN. The Chloride of Sodium or Muriate of Ammonia test, detects Nitrate of Potash and other salts that the Nitrate of Silver may be contaminated with.

ARGENTI OXIDUM.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Nitrate of Silver - - ½oz. Lime Water half a gallon, or a sufficient quantity. Distilled Water - - ½ pint. Dissolve the Nitrate of Silver in four ounces of the distilled Water, and, having poured the solution into a bottle containing the lime water, shake the mixture well, and then set it by till the sediment subsides. The supernatant solution being drawn off, let the sediment be placed upon a filter, and when washed with the remainder of the distilled water, let it be dried at a heat not exceeding 212°, and preserved in a bottle.

DOSE.—Half a grain to 2 grains three times a day in a pill; but this Oxide should not be given with Calomel and Conserve, because a violent action ensues in consequence of the reduction of the Oxide by the Sugar, and its combination with the Chlorine, engendering heat sufficient to burn the fingers. As an ointment, 1 drachm to 1 ounce of Lard.

ARSENICUM PURUM.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	A process. (*Vide* Appendix.)

ASSAFŒTIDA PRÆPARATA.

LONDON.	EDINBURGH.	DUBLIN.
Prepared in the same way as *Ammoniacum Preparatum.*	Not in Pharm.	Not in Pharm.

ATROPIÆ SULPHAS.

LONDON.	EDINBURGH.	DUBLIN.
Dilute Sulphuric Acid ʒ ii. fl. Atropine - - ℈ viiss. or q. s. Distilled Water - - ʒ iv. fl.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.
To the acid and water mixed; add the Atropine in successive portions to saturation. Filter the liquor, and evaporate at a gentle heat that it may crystallize.		

This salt is intended to be used externally.

USE.—From 2 to 6 grains dissolved in an ounce of Distilled Water, one drop of which is let fall into the eye to dilate the pupil. For an ointment; 5 grains to half an ounce of Lard, sometimes stronger.

BARII CHLORIDUM.

Crystals. Mentioned only in the Appendix of the Pharmacopœia. Used as a Re-agent. No process given.	*Baryta Murias.*	
	Carbonate of Baryta, in fragments - - - - - 10oz. Pure Muriatic Acid - ½ pint. Distilled Water - - 2 pints.	Carbonate of Barytes, coarsely powdered - - - 10oz. Pure Muriatic Acid - 8 fl. oz. Distilled Water, as much as is sufficient.
	Mix the acid and water; add the carbonate by degrees; apply a gentle heat towards the close of the effervescence; and when the action is over, filter, concentrate, and set aside to crystallize.	Dilute the acid with one and half pint of the water, add the Barytes, and when effervescence is over evaporate to dryness. Ignite the residue for twenty minutes; when cold, powder it and boil it for ten minutes with a pint and half of water, pour off and boil again with ten ounces of water, filter the solutions and evaporate to fourteen ounces, that crystals may form. More crystals may be obtained by further evaporation.
	Another process is given for procuring it from the Sulphate of Barytes, for which see Appendix.	There is another process given, using Sulphate of Barytes, for which see Appendix.

It is now only employed as a re-agent.

BISMUTHI NITRAS.

	Bismuthum Album.	*Bismuthi Subnitras.*
Bismuth - - - - - 1oz.	Bismuth, in fine powder 1oz.	Bismuth, in small fragments, 2oz.
Nitric Acid - - - 1½ fl. oz.	Nitric Acid - - - 1½ fl. oz. (Sp. Gr. 1·380.)	Pure Nitric Acid - - 3 fl. oz.
Distilled Water - - 3 pints.	Water - - - - - 3 pints.	Distilled Water - - 1 gallon.
Mix one fluid ounce of the water with the Acid, add the Bismuth, and apply heat till it is dissolved. Pour the solution into the rest of the	Add the metal gradually to the acid, favouring the action with a gentle heat, and adding a very little distilled water, as soon as crystals or	Into the acid, first diluted with three ounces of the water, introduce the Bismuth, in successive portions, and having, when the spontaneous

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
water, and collect on a calico filter. Wash with distilled water, and dry with a gentle heat.	a white powder may begin to form. When the solution is complete, pour the liquid into the water. Collect the precipitate immediately on a calico filter, wash it quickly with cold water, and dry it in a dark place.	action has ceased, applied for ten minutes a heat approaching to that of ebullition, decant the solution off any particles of metal which may remain undissolved; evaporate the solution at a gentle heat until it is reduced to two fluid ounces, and then pour it into half a gallon of the water; the precipitate which is formed is repeatedly washed and dried at 212°, then powdered.

DOSE.—Five grains to one scruple in powder, linctus, or pill, during meals. For an ointment, 2 drachms to 1 ounce of Cerate.

TEST.—Soluble in Nitric Acid without effervescence; diluted Sulphuric Acid added, nothing should be thrown down, showing the absence of Lead.

The Edin. ordering it to be dried in a dark place, is to avoid discoloration by a small quantity of Silver sometimes found in the Bismuth.

CALCII CHLORIDUM.

LONDON.	EDINBURGH.	DUBLIN.
	Calcis Murias.	
In the Mat. Med. No process.	White Marble in fragments, 10oz. Muriatic Acid (Commercial) & Water, of each - - 1 pint.	Chalk, in small fragments 2lbs. Pure Muriatic Acid - 2½ pints. Distilled Water - - 6 pints. Slacked Lime, as much as is sufficient.
	Mix the acid and water; add the marble by degrees; and when the effervescence is over, add a little marble in fine powder till the liquid no longer reddens litmus; filter and concentrate to one half; put the remaining fluid in a cold place to crystallize; preserve the crystals in a well closed bottle. More crystals will be obtained by concentrating the mother liquor.	Into the acid, first diluted with the water, introduce the chalk in successive portions, and when the effervescence has ceased, boil for ten minutes. Add now, stirring well, a very slight excess of slacked lime, and collect on a calico filter. Slightly acidulate the filtered solution, evaporate to dryness, and submit it to a low red heat. Finally powder coarsely in a warm mortar, and keep it in a well stopped bottle.

For Dose see Liq. Calcii Chloridi.

TEST.—Extremely deliquescent; a solution of 76 grains in 1 fluid ounce of Distilled Water, precipitated by 49 grains of Oxalate of Ammonia, remains precipitable by more of the test.

CALCIS CARBONAS PRÆCIPITATUM.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Chloride of Calcium - 5oz. Crystals of Commercial Carbonate of Soda - 13oz. Boiling water - - 2 quarts.
		Dissolve each salt in a quart of the water; mix the two solutions, and when the pre-

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
Not in Pharm.	Not in Pharm.	cipitate has subsided draw off the supernatant liquor. Transfer the sediment to a calico filter, and wash it with boiling hot distilled water, until the washings cease to give a precipitate with Nitrate of Silver. Finally dry at a temperature not exceeding 212°.

DOSE.—Ten to 100 grains in powder or mixture, as an antacid or for diarrhœa.

TEST.—Same as Creta Præparata.

CALCIS PHOSPHAS PRÆCIPITATUM.

Not in Pharm.	Not in Pharm.	A process. (*Vide* Appendix.)

DOSE.—10 to 30 grains, but is now rarely given internally.

CALOMELAS.

Vide Hydrargyri Chloridum.

CALX.

		Calx Recens Usta.
In the Mat. Med. Lime freshly obtained from chalk.	Heat white marble broken into small fragments in a covered crucible at a full red heat for three hours, or till the residuum when slaked and suspended in water no longer effervesces on the addition of Muriatic Acid.	In the Mat. Med. No process.

TEST.—On the addition of water it crumbles into powder. Soluble in dilute Hydrochloric Acid without effervescence. Ammonia added in excess throws nothing down.

CARBO ANIMALIS.

	Purificatus.	
In the Mat. Med. Charcoal prepared from Bullocks' blood, by fire.	Ivory Black - - - - 1 lb. Muriatic Acid (Commercial) & Water of each - - 12 fl. oz. Mix the acid and water; add gradually the ivory black, stirring occasionally. Digest with a gentle heat for two days, agitating from time to time. Then boil; dilute with two pints of water; collect the charcoal on a calico filter, and wash with water till the washings scarcely precipitate with solution of Carbonate of Soda. Heat the charcoal, first moderately and then to redness, in a closely covered crucible.	Ivory Black - - - - 5lb. Muriatic Acid of Commerce, 3 pints. Water, 3 gallons and 3 pints. Distilled Water as much as is necessary. To the acid, diluted with three pints of water, gradually add the ivory black, and digest, with repeated stirring, at a gentle heat for twenty-four hours. Wash two or three times with a gallon of water, and decant. Collect on a calico filter, wash with distilled water until the washings cease to give a precipitate with Nitrate of Silver. Finally dry at first with a gentle heat, and lastly at between 300° and 400°.

The process above given is to dissolve out the Phosphate and Carbonate of Lime, which Ivory Black always contains.

TEST.—When incinerated with its own volume of red Oxide of Mercury, it is dissipated, leaving only a scanty ash.—EDIN.

The principal use of animal Charcoal is as a decolorising agent in various pharmaceutical processes, but it has been given internally to destroy fœtor.

CASSIA PRÆPARATA.

LONDON.	EDINBURGH.	DUBLIN.
	Cassia Pulpa.	AVOIRDUPOIS WEIGHT.
Cassia, broken lengthwise, 1 lb. Distilled Water, as much as may suffice to cover the Cassia. Macerate for six hours with frequent stirring; strain through a hair sieve, and evaporate in a water bath to the consistence of a confection.	Pulp of the Pods of Cassia Fistula.	Not in Pharm.

CATAPLASMA CARBONIS.

Boiling Water - - 10 fl. oz. Bread - - - - - 2oz. Powdered Linseed - - ʒ x. Powdered Charcoal - - ʒ iii. Macerate the bread in the water a short time near the fire; then mix it, and add the Linseed by degrees, stirring the ingredients, that a soft cataplasm may be formed. Mix in two drachms of the Charcoal, and sprinkle on the surface what remains.	Not in Pharm.	Not in Pharm.

CATAPLASMA CONII.

Boiling Water - - 10 fl. oz. Powdered Linseed, 4½oz, or q. s. Extract of Hemlock - - 1oz. To the water add the Linseed by degrees, stirring constantly, to form a cataplasm. On this spread the Extract, first softened in water.	Not in Pharm.	Not in Pharm.

CATAPLASMA FERMENTI.

Beer-Yeast, and Water, heated to 100°, - of each 5 fl. oz. Flour - - - 1 lb. Mix the yeast with the water, add the flour, and stir to make a cataplasm. Place it near the fire until it rises.	Not in Pharm.	Not in Pharm.

CATAPLASMA LINI.

Boiling Water - - 10 fl. oz. Powdered Linseed, 4½oz. or q. s. Add the Linseed by degrees to the water, constantly stirring, to form a cataplasma.	Not in Pharm.	Not in Pharm.

LONDON.	EDINBURGH.	DUBLIN.
	CATAPLASMA SINAPIS.	
Boiling Water - - 10 fl. oz. Powdered Linseed, Powdered Mustard—of each 2½oz. or q. s. The powders being first mixed, are added by degrees to the water, constantly stirring, to form a cataplasm.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.
	CATAPLASMA SODÆ CHLORINATÆ.	
Boiling Water - - 6 fl. oz. Powdered Linseed - 4½oz. Solution of Chlorinated Soda, fl. 2oz. Add the Linseed by degrees to the water, stirring constantly, then mix in the Chlorinated Soda.	Not in Pharm.	Not in Pharm.
	CERATUM.	
Bees' Wax - - - - 20oz. Olive Oil - - - - 1 pint. Add the Oil to the melted Wax, and mix.	Not in Pharm.	Not in Pharm.
	CERATUM CALAMINÆ.	
Prepared Calamine, Bees' Wax, of each - - 7½oz. Olive Oil - - - - 1 pint. Mix the Oil with the melted Wax, then remove them from the fire, and when they first begin to thicken, add the Calamine, and stir constantly until they cool.	Calamine, prepared in the same manner as prepared Chalk, 1 part. Simple Cerate - - 5 parts. Mix them well together.	Not in Pharm.
	CERATUM CANTHARIDIS.	
Cantharides, in very fine powder - - - - - - 1oz. Spermaceti Cerate - - 6oz. Add the Cantharides to the Cerate, softened by heat, and mix.	Not in Pharm.	Not in Pharm.
	CERATUM CETACEI.	
Spermaceti - - - - 2oz. White Wax - - - - 8oz. Olive Oil - - - - 1 pint. Add the Oil to the Spermaceti and Wax melted together, and then stir them with a spatula until they cool.	Not in Pharm. *Vide* Ceratum Simplex.	Not in Pharm.

CERATUM HYDRARGYRI COMPOSITUM.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Ointment of Mercury, Compound Soap Cerate—of each 6oz. Camphor - - - - - 1½oz. Rub them together.	Not in Pharm.	Not in Pharm.

CERATUM PLUMBI ACETATIS.

LONDON.	EDINBURGH.	DUBLIN.
Acetate of Lead, in powder, ʒ v. White Wax - - - - 5oz. Olive Oil - - - - 1 pint. Dissolve the wax in 18 fluid ounces of the oil, to these gradually add the acetate separately triturated with the remainder of the oil, and stir with a spatula until they unite.	Not in Pharm.	Not in Pharm.

CERATUM PLUMBI COMPOSITUM.

LONDON.	EDINBURGH.	DUBLIN.
Solution of Diacetate of Lead, 6 fl. oz. Bees' Wax - - - - 8oz. Olive Oil - - - - 1 pint. Camphor - - - - - ʒ i. Mix the melted wax with 16 fluid ounces of the oil, then remove them from the fire, and when they begin to thicken, add gradually the solution of Acetate of Lead, and stir constantly with a spatula until they have cooled; lastly, mix with them the camphor dissolved in the remainder of the oil.	Not in Pharm.	Not in Pharm.

CERATUM RESINÆ.

LONDON.	EDINBURGH.	DUBLIN.
Resin, Bees' Wax—of each - 15oz. Olive Oil - - - - 1 pint. Melt the resin and wax together over a slow fire; then add the oil, and press the cerate, while hot, through a linen cloth.	Not in Pharm.	Not in Pharm.

CERATUM SABINÆ.

Vide Unguentum Sabinæ.

CERATUM SAPONIS COMPOSITUM.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Soap (hard) - - - - 10oz. Bees' Wax - - - - - 12½oz. Oxide of Lead, in powder 15oz. Olive Oil - - - - - 1 pint. Vinegar - - - - - 1 gallon. Boil the vinegar, with the oxide over a slow fire, constantly stirring them until they unite; then add the soap and boil again in a similar manner, until all the moisture is evaporated; lastly, mix with these the wax previously dissolved in the oil.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.

CERATUM SIMPLEX.

Not in Pharm.	Olive Oil - - - - 6 parts. White Wax - - - 3 parts. Spermaceti - - - - 1 part. Heat the oil gently; add the wax and spermaceti; stir the whole briskly when it is fluid, and continue the agitation as it cools.	Not in Pharm.

CHLOROFORMYL.

A process. (*Vide* Appendix.)	Not in Pharm.	A process. (*Vide* Appendix.)

DOSE.—5 to 30 minims suspended by mucilage in a draught; or for inhalation, 1 drachm to 2 drachms.

TEST.—Colourless, oily-looking liquid, of a pleasant odour. Specific gravity not less than 1·48. It is not quite perfectly soluble in water; when dropped into that liquid it falls suddenly to the bottom, and remains there without opalescence; does not turn the colour of litmus red. When a wine-glassful, containing a few drops of Chloroform is rapidly swung round till evaporated, it leaves no odour behind. When shaken with Sulphuric Acid in a stoppered vial, no change of temperature or colour takes place. When shaken with an eqnal bulk of Distilled Water no change of volume occurs.

CONFECTIO AMYGDALÆ.

Sweet Almonds - - - 8oz. Powdered Acacia - - - 1oz. Sugar - - - - - - - 4oz. Bruise the almonds, first macerated in cold water, and deprived of their external coats; then rub them through a fine metallic sieve; add the other ingredients, and beat all together until incorporated. This confection will keep longer sound, if the almonds, first decorticated, dried, and rubbed into the finest powder, be mixed with the acacia and sugar, separately powdered, and the mixed ingredients be kept in a well stopped bottle.	*Conserva Amygdalarum.* Sweet Almonds - - - 8oz. Powder of Gum Arabic 1oz. White Sugar - - - - 4oz. Blanch the Almonds by maceration and peeling, and beat them with the gum and sugar into a uniform pulpy mass.	Not in Pharm.

CONFECTIO AROMATICA.

LONDON.	EDINBURGH.	DUBLIN.
	Electuarium Aromaticum.	AVOIRDUPOIS WEIGHT.
Cinnamon, Nutmeg - - of each 2oz. Clove - - - - - - - 1oz. Cardamom - - - - ½oz. Saffron - - - - - 2oz. Prepared Chalk - - - 16oz. Sugar - - - 2lbs. = 24oz. Distilled Water, as much as may be necessary.	Aromatic Powder - 1 part. Syrup of Orange Peel, 2 parts.	Aromatic Powder - - 5oz. Dried Saffron, in fine powder, ½oz. Oil of Cloves - - - fl. ʒ ss. Simple Syrup - - - 5 fl. oz. Clarified Honey, by weight 2oz.
Rub the dry ingredients together into a very fine powder, and keep them in a closed vessel. Whenever the confection is to be used, to each ounce of the powder add 2 fluid drachms of water, and mix all well together.	Mix them and triturate them into a uniform pulp.	Rub the aromatic powder with the saffron; add the syrup and honey, and beat them together till thoroughly mixed; lastly, add the oil of cloves.

Remark.—The London contains a large quantity of Chalk and Nutmeg. The Edinburgh and Dublin more resemble each other, but differ widely from the London. **DOSE.**—20 to 40 grains, London.

CONFECTIO AURANTII.

	Conserva Aurantii.	Not in Pharm.
Fresh rind of Oranges, separated by a rasp - - 1 lb. Sugar - - - - - - - 3 lbs.		
Bruise the rind in a stone mortar with a wooden pestle; then add the sugar, and beat altogether until thoroughly incorporated.	Grate off the outer rind of bitter Oranges, and beat it into a pulp, adding gradually thrice its weight of white Sugar.	

CONFECTIO CASSIÆ.

Prepared Cassia - - 6oz. Manna - - - - - - - 2oz. Prepared Tamarind - - 1oz. Syrup of Roses - - 8 fl. oz.	Not in Pharm.	Not in Pharm.
Bruise the manna, and dissolve it in the syrup; then mix in the tamarind and cassia, and evaporate till the proper consistence is obtained.		

CONFECTIO CATECHU COMPOSITUM.

	Electuarium Catechu.	
Not in Pharm.	Catechu, and Kino - - - - of each 4oz. Cinnamon, and Nutmeg - - - of each 1oz. Opium, diffused in a little Sherry - - - - ʒ iss. Syrup of Red Roses, reduced to the consistence of honey, 1¾ pint.	Compound Powder of Catechu, 5oz. Simple Syrup - - 5 fl. oz.
	Pulverize the solids; mix the opium and syrup, then the powders, and beat them thoroughly into a uniform mass.	Add the syrup gradually to the powder, and mix them well together.

CONFECTIO OPII.

LONDON.	EDINBURGH.	DUBLIN.
	Electuarium Opii.	AVOIRDUPOIS WEIGHT.
Powdered Opium - - ʒ vi. Long Pepper - - - - 1oz. Bruised Ginger - - - 2oz. Carraway Seed - - - - 3oz. Powdered Tragacanth - ʒ ii. Syrup - 16 fl. oz. = 19½ oz.	Opium, diffused in a little Sherry - - - - - ½oz. Aromatic Powder - - 6oz. Senega, in fine powder - 3oz. Syrup of Ginger - - - 1 lb.	Not in Pharm.
Rub the dry ingredients together to a very fine powder, and keep in a closed vessel; and as often as the confection is to be used, add by degrees the powder to the syrup made hot, and mix.	Mix them together, and beat them into an Electuary.	
35 grains contain 1 grain of opium.	43 grains contain 1 grain of opium.	

DOSE.—10 to 60 grains, usually with Chalk mixture. It will be seen that 10 grains of London are equal to 12 grains of Edin., and the ingredients also different.

The prescriber will order Confection; and to proportion the quantity of Powder and Syrup when required with accuracy, is difficult.

CONFECTIO PIPERIS.

LONDON.	EDINBURGH.	DUBLIN.
	Electuarium Piperis.	*Conf. Piperis Nigri.*
Black Pepper, Elecampane Root, of each 1lb. Fennel Seeds - - - - 3lbs. Honey, and Sugar - - - of each 2lbs.	Black Pepper, and Liquorice Root, in powder, of each - - - - - - 1 lb. Fennel - - - - - 3 lbs. Honey, and White Sugar - of each 2 lbs.	Black Pepper, in fine powder, Liquorice Root, in powder, of each - - - - - ½oz. Oil of Fennel - - - fl. ʒ ss. Clarified Honey - - - 2oz. Refined Sugar - - - 1oz.
Rub the dry ingredients together to a very fine powder, and keep in a covered vessel. When the confection is to be used, add by degrees the powder to the honey, and beat together until well incorporated.	Triturate the solids together into a very fine powder; add the honey; and beat the whole into a uniform mass.	Rub the dry substances together into a very fine powder, then add the honey and oil, and beat them into a uniform mass.

The London College uses Elecampane. Edin. and Dublin Liquorice Root; and the Dublin College, Oil of Fennel, instead of Fennel. It will be seen that London and Edin. are of the same strength, and the Dublin one-eighth stronger of Pepper.

CONFECTIO ROSÆ.

LONDON.	EDINBURGH.	DUBLIN.
	Conserva Rosæ.	
Fresh Red Rose Petals - 1 lb. Sugar - - - - - - 3 lbs.	Beat the petals of the Rosa Gallica to a pulp, gradually adding twice their weight of white sugar.	Dried Petals of the Gallic Rose - - - - - 1oz. Rose Water - - - 2 fl. oz. Refined Sugar - - - 8oz.
Bruise the rose petals in a stone mortar, add the sugar, pound them again until all be thoroughly incorporated.		Macerate the petals in the rose water for two hours, add the sugar gradually, and beat them into a uniform mass. Or Fresh Petals of the Gallic Rose - - - - - 3oz. Refined Sugar - - - 8oz. Rub the petals in a mortar, then add the sugar gradually, and beat them together till they are intimately mixed.

The Dublin Confection contains the largest quantity of Rose Leaves, and London the least.

CONFECTIO ROSÆ CANINÆ.

LONDON.	EDINBURGH.	DUBLIN.
	Conserva Rosæ Fructus.	AVOIRDUPOIS WEIGHT.
Fruit of the Dog Rose, without the seeds - 1 lb. = 12oz. Powdered Sugar - - 20oz. Pound the rose pulp with the sugar added gradually, until all is thoroughly incorporated.	Take any convenient quantity of hips, carefully deprived of their carpels; beat them to a fine pulp, adding gradually thrice their weight of white sugar.	Not in Pharm.

The London College orders 50 per cent. more of Hips than that of Edin.

CONFECTIO RUTÆ.

Fresh Rue (bruised,) Carraway Seeds, Bay Berries - of each 1½oz. Prepared Sagapenum - ½oz. Black Pepper - - - - ʒ ii. Honey - - - - - 16oz. Distilled Water, as much as may be necessary. Rub the dry ingredients together to a very fine powder; then the sagapenum being liquefied in the water and honey over a slow fire, add the powder gradually to it, and mix all together.	Not in Pharm.	Not in Pharm.

CONFECTIO SCAMMONII.

Scammony - - - - 1½oz. Cloves (bruised,) Ginger (bruised,) of each ʒvi. Oil of Carraway - - fl. ʒss. Syrup of Roses, as much as may be necessary. Rub the dry ingredients together to a very fine powder, and keep in a closed vessel; when the confection is to be used, drop the syrup in and again rub together; lastly, add the oil, and mix them all.	Not in Pharm.	Scammony, in fine powder 3oz. Ginger, in fine powder - 1½oz. Oil of Carraway - - - fl. ʒi. Oil of Cloves - - - fl. ʒss. Simple Syrup - - - 3 fl. oz. Clarified Honey - - - 1½oz. Beat the powders with the syrup and honey into a uniform mass, then add the oils, and mix all well together.

It will be more convenient for general dispensing, to keep the Confection ready prepared, as in practice it is found difficult to adjust uniformly the quantity of Oil and of Syrup, when it is to be used.

DOSE.—Half a drachm to 1 drachm.

CONFECTIO SENNÆ.

	Electuarium Sennæ.	
Senna - - - - - - - 8oz. Figs - - - - - - - 1 lb. Prepared Tamarinds, „ Cassia, „ Prunes, of each ½lb. Coriander Seed - - - 4oz. Fresh Liquorice (bruised) 3oz. Sugar - - - - - - 2½lbs. Distilled Water - - 3 pints. Rub the senna with the coriander, and by a sieve separate ten ounces of the mixed	Senna - - - - - - - 8oz. Figs - - - - - - - 1 lb. Liquorice Root (bruised) 3oz. Coriander - - - - - 4oz. Pulp of Prunes - - - 1 lb. White Sugar - - - 2½lbs. Water - - - - 3¼ pints. Powder the senna and coriander; sift out 10 ounces of the mixture; boil the residue	Senna, in fine powder - 2oz. Coriander, in fine powder 1oz. Oil of Carraway - - fl. ʒss. Pulp of Prunes - - - 5oz. Pulp of Tamarinds - - 2oz. Brown Sugar - - - 8oz. Water - - - - - - 2oz. Dissolve the sugar in the water, and beat the pulps with the syrup to a uniform consist-

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
powder. Boil the figs and liquorice with the water to one half, then press and strain. Evaporate the strained liquor in a water bath until 24 fluid ounces remain; then add the sugar, and make a syrup. With this mix the tamarinds, cassia, and prunes, and a little before they cool add the sifted powder by degrees; stir diligently with a spatula until all be well incorporated.	with the figs and liquorice in the water down to one half; express and strain the liquor, and evaporate it to 24 fluid ounces; dissolve in this the sugar, and add the liquid by degrees to the pulp of prunes; mix gradually the powder, and triturate the whole carefully to a uniform pulp.	ence; having stirred in the powders and oil of carraway, mix all well together, and heat the mass thoroughly in a water bath for ten minutes.

The ingredients of the three Colleges differ, but are nearly alike in strength; the Edin., however, is the strongest of the three.

CONFECTIO SULPHURIS.

Not in Pharm.	Not in Pharm.	Sublimed Sulphur - - 2oz. Bitartrate of Potash - 1oz. Clarified Honey - - - 1oz. Syrup of Ginger, Syrup of Saffron, of each ½ fl. oz. Triturate all the ingredients in a mortar, until they are intimately mixed.

CONFECTIO TEREBINTHINÆ.

Not in Pharm.	Not in Pharm.	Oil of Turpentine - 1 fl. oz. Liquorice Root, in powder 1oz. Clarified Honey - - - 2oz. Rub the oil of turpentine with the liquorice powder, then add the honey, and beat them altogether into a uniform consistence.

DOSE.—2 to 4 ounces for adults; half an ounce to 1 ounce for children, diffused in water.

CRETÆ PRÆPARATA.

In the Mat. Med. Friable Carbonate of Lime, rubbed into the finest powder, and washed. (No process given.)	Take any convenient quantity of chalk; triturate well in a mortar with a little water; then pour it into a large vessel nearly full of water, and agitate briskly; allow it to rest for a short time, and pour the milky water into another vessel, in which the fine suspended chalk is to be left slowly to subside; repeat this process with the coarsely powdered chalk which subsided quickly in	Chalk - - - - - - 1 lb. Water, a sufficient quantity. Reduce the chalk to a fine powder, and triturate in a mortar with as much water as will give it the consistence of cream; fill the mortar with water, and stir well, giving the whole a circular motion. Allow the mixture to stand for 15 seconds, and then decant the milky liquid into a large vessel. Triturate what remains in the

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
	the first vessel; collect the fine powder in the second vessel on a filter of linen or calico, and dry it.	mortar, adding as much water as was previously used, and, after allowing it to settle for 15 seconds, again decant, and let this process be repeated several times. Transfer the fine sediment which subsides, to a calico filter, and dry at a temperature not exceeding 212°.

DOSE.—10 grains to 100 in some Aromatic Mixture as an antacid, or in cases of diarrhœa.

TEST.—It is almost entirely soluble in dilute Hydrochloric Acid (provided that it contains no Sulphate of Lime,) giving off small bubbles of Carbonic Acid. Hydrosulphuric Acid does not throw any thing down from this solution, neither is it altered after it has been boiled, either by ammonia or solution of lime added in excess.—LOND. A solution of 25 grains in 10 fluid drachms of Pyroligneous Acid, when neutralized by Carbonate of Soda, and precipitated by 32 grains of Oxalate of Ammonia, continues precipitable after filtration by more of the test.—EDIN.

CUPRI AMMONIO-SULPHAS.

LONDON.	EDINBURGH.	DUBLIN.
	Cuprum Ammoniatum.	
Sulphate of Copper - - 1oz. Sesquicarbonate of Ammonia, 1½oz.	Sulphate of Copper - - 2oz. Carbonate of Ammonia 3oz.	Sulphate of Copper - - 2oz. Commercial Sesquicarbonate of Ammonia - - - - 3oz.
Rub them together until carbonic acid ceases to escape; then dry the ammonio-sulphate of copper in the air, wrapped in bibulous paper.	Triturate them thoroughly together till effervescence ceases; wrap the product in blotting paper, and dry it first by folds of blotting paper, afterwards by exposure to the air for a little, and preserve it in closely stopped bottles.	Rub them together in a porcelain mortar until effervescence has ceased, then roll up the residue in bibulous paper, and place it on a porous brick. When dry keep it in a well stopped bottle.

DOSE.—Half a grain gradually increased to 5 grains three times daily in form of pill, as a tonic, and in epilepsy. As a lotion 15 grains to 2 ounces of water in Prurigo genitalium.

TEST.—Pulverulent; dark blue; at an intense heat it is changed into Oxide of Copper, first Sesquicarbonate, and afterwards Sulphate of Ammonia being thrown off. It is soluble in water. This solution changes the colour of turmeric to brown; and Arsenious Acid being added, it turns green: it has a styptic and metallic taste.

INCOMPATIBLES.—Acids, Potash, Soda, and Lime Water.

CUPRI SULPHATIS.

LONDON.	EDINBURGH.	DUBLIN.
Commercial Sulphate of Copper - - - - - - 4lbs. Boiling distilled Water 4 pts.		
Pour the water on the sulphate, and apply heat, constantly stirring until it be dissolved; filter the solution whilst hot, and put it aside to crystallize. Pour off the liquid and evaporate, that crystals may again form; then dry them all.	In the Mat. Med. No process.	In the Mat. Med. No process.

DOSE.—3 to 15 grains as a speedy emetic in cases of narcotic poisoning. As a tonic or astringent, from ¼ of a grain increasing it to 1 grain or more, so as not to excite vomiting. As a *topical* agent, in substance much esteemed for its efficacy in repressing soft and spongy granulations called "proud flesh." In solution for excessive secretions from mucous surfaces and superficial ulcerations, from 2 to 10 grains in an ounce of water. For injection, 1 to 4 grains in an ounce of water.

TEST.—Is soluble in water; whatever Ammonia throws down from this solution is re-dissolved by an excess of the precipitant.

INCOMPATIBLES.—Alkalis and their Carbonates, Lime Water, Acetate of Lead, Nitrate of Silver, Corrosive Sublimate, all the Salts of Iron except the Sulphate, and most of the astringent Vegetables.

CUPRI SUBACETAS PRÆPARATUM.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
		Subacetate of Copper, a convenient quantity.
In the Mat. Med. Ærugo.	In the Mat. Med. Ærugo.	Reduce it to powder, by careful trituration in a porcelain mortar, and separate the finer parts for use by means of a sieve.

Partly soluble in water; almost entirely so in dilute Sulphuric Acid, with the aid of heat; Ammonia added in excess to the solution throws nothing down.

DECOCTUM ALOES COMPOSITUM.

LONDON.	EDINBURGH.	DUBLIN.
	Decoctum Aloes.	
Extract of Liquorice - ʒvii.	Extract of Liquorice - ½oz.	Extract of Liquorice - ½oz.
Carbonate of Potash - - ʒi.	Carbonate of Potash - ℈ii.	Pure Carbonate of Potash, ℈ii.
Extract of Aloes,	Socotorine or Hepatic Aloes,	Hepatic Aloes, in powder, ʒiss.
Powdered Myrrh,	Powder of Myrrh,	Myrrh, in powder,
Saffron - - - of each ʒiss.	Saffron - - - - of each ʒi.	Saffron, chopped fine, of each ʒi.
Distilled Water - - 1½pint.	Water - - - - - 16 fl. oz.	Water - - - - - 14 fl. oz.
Compound Tincture of Cardamoms - - - - 7 fl. oz.	Compound Tincture of Cardamom - - - - 4 fl. oz.	Compound Tincture of Cardamoms, as much as is sufficient.
Boil down the liquorice, potash, aloes, myrrh and saffron with the water to a pint, and strain; then add the tincture.	Mix the aloes, myrrh, saffron, liquorice, and carbonate of potash with the water, boil down to 12oz., filter, and add the compound tincture of cardamom.	Rub the aloes, myrrh, and carbonate of potash together, then add the saffron and extract of liquorice, and boil for ten minutes in a covered vessel; cool, strain through flannel, and add of compound tincture of Cardamoms as much as will make 16 fl. oz.
Resulting Product - 27 *fl. oz.*	*Resulting Product* - 16 *fl. oz.*	

The Dublin form contains half as much more of Aloes as the Edinburgh; the other ingredients are the same. London and Edinburgh do not materially differ.

DOSE.—From half an ounce to 2 ounces, as a mild cathartic, tonic and antacid. It is known to the public as "Beaume de Vie."

DECOCTUM AMYLI.

Vide Mucilago Amyli.

DECOCTUM CETRARIÆ.

LONDON.	EDINBURGH.	DUBLIN.
		Decoct. Lichenis Islandici.
Liverwort - - - - - ʒv.	Not in Pharm.	Iceland Moss - - - - 1oz.
Distilled Water - - 1½ pint.		Water - - - - - 1½ pint.
Boil down to a pint and strain.		Wash the moss in cold water, to remove impurities; then boil it for ten minutes in a covered vessel, and strain while hot. The product should measure about 1 pint.

LONDON. **EDINBURGH.** **DUBLIN.**

DECOCTUM CHIMAPHILÆ.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
	Olim. *Decoct. Pyrolæ Umbellatæ.*	*Decoct. Pyrolæ.*
Winter Green - - - 1oz.	Not in Pharm.	Leaves of Winter Green, dried, ½oz.
Distilled Water - - 1½ pint.		Water - - - - - ½ pint.
Boil down to a pint and strain.		Boil for ten minutes in a covered vessel, and strain. The product should measure about 8oz.

DECOCTUM CINCHONÆ.

LONDON.	EDINBURGH.	DUBLIN.
	Flava.	
Yellow Bark, bruised - ℥x.	Crown, gray, yellow, or red Cinchona, bruised - 1oz.	Not in Pharm.
Distilled Water - - 1 pint.	Water - - - - 24 fl. oz.	
Boil for 10 minutes in a covered vessel, and strain the liquor whilst hot.	Boil for 10 minutes; let the decoction cool, then filter it, and evaporate to 16 fl. oz.	

The quantity of strained decoction of the London Pharm. is not defined; the Edinburgh properly orders a uniform measure. The London will always deposit largely, whereas the Edinburgh orders filtration.

DECOCTUM CINCHONÆ PALLIDÆ.

LONDON.	EDINBURGH.	DUBLIN.
Decoctum Cinchonæ Lancifoliæ. Pharm. 1836.		*Decoc. Cinchonæ.*
To be prepared like Decoc. Cinchonæ.		Peruvian Bark (crown or pale), in coarse powder - - ½oz.
		Water - - - - - ½ pint.
		Boil for 10 minutes in a covered vessel, and strain while hot. The product should measure about 8oz.

INCOMPATIBLES with the preparations of Cinchona Bark, are Ammonia, Lime Water, Carbonate of Potash, Arsenite of Potash, Tartar Emetic, the Sesqui-Salts of Iron, the Acetates of Lead, Corrosive Sublimate, Nitrate of Silver, Tincture of Galls, and Gelatine.

DECOCTUM CINCHONÆ RUBRÆ.

LONDON.	EDINBURGH.	DUBLIN.
To be prepared in the same manner as Decoct. Cinchona.	*Vide* Decoct. Cinchonæ.	Not in Pharm.

It would have been better to have kept to the terms *pale*, *yellow*, and *red*. The London College now calls the *yellow*, "Cinchona," and in former Pharmacopia the *pale*, had that name.

DECOCTUM CYDONII.

LONDON.	EDINBURGH.	DUBLIN.
Quince Seed - - - - ℥ii.	Not in Pharm.	Not in Pharm.
Distilled Water - - 1 pint.		
Boil over a slow fire for 10 minutes, and strain.		

DECOCTUM DULCAMARÆ.

LONDON.	EDINBURGH.	DUBLIN.
Stems of Woody Nightshade, ℥x.	Dulcamara, chopped down, 1oz.	Twigs of Woody Nightshade, dried - - - - - ½oz.
Distilled Water - - 1½ pint.	Water - - - - 24 fl. oz.	Water - - - - - ½ pint.
Boil down to a pint, and strain.	Mix them, boil, and concentrate by evaporation to 16 fl. oz.	Boil for 10 minutes in a covered vessel, and strain. The product should measure about 8oz.

The strength is the same in the three Pharmacopœias.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.

DECOCTUM GALLÆ.

Bruised Galls - - - 2½oz. Distilled Water - - 2 pints. Boil down to a pint, and strain.	Not in Pharm.	Not in Pharm.

Incompatibles.—Metallic Salts, Vegetable Alkaloids, Isinglass, Gelatine, and Albuminous Fluids.

DECOCTUM GRANATI.

Pomegranate (Rind) - 2oz. Distilled Water - - 1½ pint. Boil down to a pint, and strain.	Not in Pharm.	Not in Pharm.

DECOCTUM GRANATI RADICIS.

Root of Pomegranate, sliced, 2oz. Distilled Water - - 2 pints. Boil down to a pint, and strain.	Not in Pharm.	Not in Pharm.

DECOCTUM GUAIACI.

Not in Pharm.	Guaiac Turnings - - 3oz. Raisins - - - - - 2oz. Sassafras, rasped, and Liquorice Root, bruised, of each 1oz. Water - - - - - 8 pints. Boil the Guaiac and Raisins with the water gently down to 5 pints, adding the Liquorice and Sassafras towards the end. Strain the decoction.	Not in Pharm.

DECOCTUM HÆMATOXYLI.

Logwood Chips - - - ℥x. Distilled Water - - 1½ pint. Boil down to a pint, and strain.	Logwood, in chips - - 1oz. Water - - - - - 1 pint. Cinnamon, in powder - ʒi. Boil the Logwood in the water down to 10 fl. oz., adding the Cinnamon towards the end, and then strain.	Logwood, in small chips, 1oz. Water - - - - - ½ pint. Boil for 10 minutes in a covered vessel, and strain. The product should measure about 8oz.

Incompatibles.—The Mineral Acids, Acetic Acid, Lime Water, Tartar Emetic, Sulphates and Acetates.

DECOCTUM HORDEI.

Pearl Barley - - - - 2½oz. Distilled Water - - 4½ pints. First wash the barley in water, that nothing may adhere to it; then half a pint of the distilled water being poured on it, boil for a little while, and reject this water also; now pour upon it the remainder, first made hot; then boil down to 2 pints, and strain.	Not in Pharm.	Pearl Barley - - - - 1½oz. Water - - - - - 1¼ pint. Wash the barley in cold water; reject the washings, and then boil for 20 minutes in a covered vessel, and strain.

DECOCTUM HORDEI COMPOSITUM.

LONDON.	EDINBURGH.	DUBLIN.
Decoction of Barley - 2 pints. Figs, sliced - - - - 2½oz. Fresh Liquorice, sliced - ʒ v. Raisins, stoned - - - 2½oz. Distilled Water - - 1 pint. Boil down to 2 pints, and strain.	*Vide* Mist. Hordei, which very much resembles the London decoction.	AVOIRDUPOIS WEIGHT. Not in Pharm.

DECOCTUM LICHENIS ISLANDICI.

Vide Decoc. Cetrariæ.

DECOCTUM LINI COMPOSITUM.

Not in Pharm.	Not in Pharm.	Linseed - - - - - 1oz. Liquorice Root, bruised - ½oz. Water - - - - - 1½ pint. Boil for 10 minutes in a covered vessel, and strain while hot.

DECOCTUM MEZEREI.

Not in Pharm.	Mezereon, in chips - - ʒ ii. Liquorice Root (bruised) ½oz. Water - - - - - 2 pints. Mix them, and boil with a gentle heat to a pint and a half, and then strain.	Not in Pharm.

DECOCTUM MYRRHÆ.

Not in Pharm.	Not in Pharm.	Myrrh - - - - - - ʒ ii. Water - - - - - 8½oz. Triturate the Myrrh with the water gradually added, then boil for 10 minutes, in a covered vessel, and strain. The product should measure about 8oz.

DOSE.—Half an ounce to an ounce, for excessive secretion from Mucous Membranes, Protracted Diarrhœa, &c.

DECOCTUM PAPAVERIS.

Poppies (bruised) - - 4oz.	Poppy-heads (sliced) - 4oz.	White Poppy Capsules (sliced or bruised) - - - 4oz.
Distilled Water - - 4 pints.	Water - - - - - 3 pints.	Water - - - - - 3 pints.
Boil for 15 minutes, and strain.	Boil for 15 minutes, and then strain.	Boil for 10 minutes, in a covered vessel, and strain.

The Colleges evidently intend that the *seeds* and Capsule are to be boiled, because in the extract and syrup it is expressly ordered that the *seeds* are to be rejected.

DECOCTUM PAREIRÆ.

Pareira Root (sliced) - ʒ x. Distilled Water - - 1½pint. Boil down to a pint, and strain.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.

DOSE.—1 to 3 ounces, three or four times a day, for checking discharges from the Mucous Membrane of the Bladder and Urethra; and according to Sir Benjamin Brodie, it has a great influence over the ropy mucous discharge of Chronic Inflamation of the Bladder.

INCOMPATIBLES.—Sesqui-Salts of Iron, the Acetates of Lead, and Tincture of Iodine.

DECOCTUM PYROLÆ.

Vide Decoc. Chimaphilæ.

DECOCTUM QUERCUS.

Oak Bark (bruised) - - ʒ x. Distilled Water - - 2 pints. Boil down to a pint, and strain.	Oak Bark - - - - - ʒ x. Water - - - - - 2 pints. Boil down to 1 pint, and strain.	Oak Bark (bruised) - 1¼oz. Water - - - - 1½ pint. Boil for 10 minutes in a covered vessel, and strain.

DOSE.—1 to 4 ounces may be used for a gargle, injection, or lotion, when an astringent is indicated.

INCOMPATIBLES.—All substances incompatible with Tannic Acid.

DECOCTUM SARSÆ.

Sarsaparilla - - - - 5oz. Distilled Water - - 4 pints. Boil down to 2 pints, and strain.	Sarza, in chips - - - 5oz. Boiling Water - - 4 pints. Digest the root in the water for two hours, at a temperature somewhat below ebullition; take out the root, bruise it, replace it, boil down to 2 pints, and then squeeze out the decoction, and strain it.	Sarsaparilla Root (sliced) 2oz. Boiling Water - - 1½ pint. Digest the Sarsaparilla with the water for one hour, then boil for 10 minutes, in a covered vessel; cool and strain. The product should measure little more than a pint.

DOSE.—Half a pint to a pint in divided doses, daily.

The strength of the three Colleges is nearly alike. This decoction quickly changes in warm weather: the Extractum Sarsæ Liquidum offers many advantages, not being liable to this change, is more portable, and can be diluted at pleasure.

INCOMPATIBLES.—Liquor Potassæ hastens its decomposition, and the Salts of Iron alter its character.

DECOCTUM SARSÆ COMPOSITUM.

Boiling Decoction of Sarsaparilla - - - - 4 pints. Sassafras (sliced) Guaiacum (wood rasped) Fresh Liquorice Root (bruised) of each ʒ x. Mezereon Root Bark - ʒ iii.	Decoction of Sarza, boiling hot - - - - - 4 pints. Sassafras, in chips, and bruised. Guaiac turnings, and Fresh Liquorice Root, of each ʒ x. Mezereon - - - - - ½oz.	Sarsaparilla Root (sliced) 2oz. Sassafras Root, in chips, Guaiacum Wood, turnings, Liquorice Root (bruised) of each - - - - - - ʒ ii. Mezereon Root Bark - ʒ i. Boiling Water - - 1½ pint.
Boil for 15 minutes, and strain. *London and Edin. much the same.*	Boil them together for 15 minutes, and strain. *Dublin little more than half the strength as to Sarsaparilla, but as to Mezereon much the same.*	Digest all the ingredients with the water in a covered vessel for one hour, then boil for 10 minutes, cool and strain. The product should measure little more than a pint.

Dried Liquorice Root makes the brightest decoction.

DECOCTUM SCOPARII.

Not in Pharm.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Broom Tops (dried) - ½oz. Water - - - - - ½pint. Boil for 10 minutes in a covered vessel, and strain. The product should measure about 8oz.

DECOCTUM SCOPARII COMPOSITUM.

	Decoc. Scoparii.	Not in Pharm.
Broom Tops, Juniper Berries (bruised,) Dandelion Root, (fresh,) of each ½oz.	Broom Tops, and Juniper Tops - of each ½oz. Bitartrate of Potash - ʒiiss.	
Distilled Water - - 1½pint.	Water - - - - - 1½ pint.	
Boil to a pint, and strain.	Boil them together down to a pint, and then strain.	

REMARKS.—Edinburgh College differs from the London, inasmuch as it orders Juniper Tops in the place of Berries, and Bitartrate of Potash in the place of Dandelion Root.

DECOCTUM SENEGÆ.

Senega Root - - - - ʒx. Distilled Water - - 2 pints.	Not in Pharm.	Not in Pharm.
Boil down to a pint, and strain.		

DECOCTUM TARAXACI.

Fresh Dandelion Root, bruised, 4oz. Distilled Water - - 1½pint.	Taraxacum, Herb and Root, fresh - - - - - 7oz. Water - - - - - 2 pints.	Not in Pharm.
Boil down to a pint, and strain.	Boil together down to 1 pint, and then strain.	

REMARKS.—The Edinburgh College has provided for the varying condition of the root at different seasons, by always ordering the whole plant to be used.

DECOCTUM TORMENTILLÆ.

Bruised Tormentil - - 2oz. Distilled Water - - 1½pint.	Not in Pharm.	Not in Pharm.
Boil down to a pint, and strain.		

USE.—Chiefly employed as an astringent injection, alone, or with Sulphate of Zinc.

INCOMPATIBLES.—Sulphate of Iron, Acetate of Lead, Nitrate of Silver, and Gelatine.

DECOCTUM ULMI.

Inner Bark of the Elm, bruised, 2½oz. Distilled Water - - 2 pints.	Not in Pharm.	Not in Pharm.
Boil down to a pint, and strain.		

DOSE.—4 to 6 ounces three or four times a day. Dr. Neligan has found it of much service in the treatment of cutaneous affections, especially when occurring in debilitated habits.

INCOMPATIBLES.—Sulphate of Iron, Acetate of Lead, Nitrate of Silver, and Gelatine.

DECOCTUM UVÆ URSI.

AVOIRDUPOIS WEIGHT.

LONDON.	EDINBURGH.	DUBLIN.
Whortleberry Leaves - 1oz.	Not in Pharm.	Uva Ursi Leaves, bruised ½oz.
Distilled Water - - 1½pint.		Water - - - - - ½ pint.
Boil down to a pint, and strain.		Boil for 10 minutes, in a covered vessel, and strain. The product should measure about 8oz.

DOSE.—1 to 3 ounces, in chronic diseases of the Bladder.

INCOMPATIBLES.—Same as those of Tannic Acid.

ELATERIUM.

Vide Extr. Elaterii.

EMPLASTRUM AMMONIACI.

LONDON.	EDINBURGH.	DUBLIN.
Prepared Ammoniacum - 5oz.	Ammoniac - - - - 5oz.	Gum Ammoniac, in coarse powder - - - - - 4oz.
Dilute Acetic Acid - 8 fl. oz.	Distilled Vinegar - 9 fl. oz.	Proof Spirit - - - 4 fl. oz.
Dissolve the ammoniacum in the acid; then, constantly stirring, evaporate the liquor, over a slow fire, to a proper consistence.	Dissolve the Ammoniac in the vinegar, and then evaporate to a proper consistence over the vapour bath, frequently stirring the liquid.	Dissolve the gum ammoniac in the spirit, with the aid of heat, and strain; then evaporate the solution by means of a steam or water bath, stirring constantly until it acquires a proper consistence.

Dr. Christison objects to Vinegar being employed, as the solution of the Ammoniacum in that fluid is impossible. Alcohol dissolves the resin of the Ammoniacum and its volatile oil, together with a portion of its gum.

USE.—As a discutient.

EMPLASTRUM AMMONIACI CUM HYDRARGYRO.

LONDON.	EDINBURGH.	DUBLIN.
Prepared Ammoniacum 1 lb.	Ammoniac - - - - - 1 lb.	Ammoniac Plaster - - 4oz.
Mercury - - - - - 3oz.	Mercury - - - - - 3oz.	Mercurial Plaster - - 8oz.
Olive Oil - - - - - fl. ℥i.	Olive Oil - - - - fl. ℥i.	
Sulphur - - - - 8 grains.	Sulphur - - - - 8 grains.	
Add the sulphur gradually to the heated oil, stirring constantly with a spatula until they unite; then rub the mercury with them until globules are no longer visible; lastly, gradually add the ammoniacum liquified, and mix them all.	Heat the oil; add the sulphur by degrees; stir them till they unite; add the mercury, and triturate till the globules disappear; then add also the ammoniac previously liquified, and mix the whole carefully.	Melt them together by means of a steam or water bath, and stir constantly until the mixture stiffens on cooling.

USE.—Applied to glandular swellings in syphilitic cases.

London and Edinburgh alike; Dublin a little weaker.

EMPLASTRUM ASSAFŒTIDÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Litharge Plaster, and Assafœtida - - of each 2oz.	Not in Pharm.
	Galbanum, and Bees' Wax - - of each 1oz.	
	Liquify the gum-resins together and strain them, then add the plaster and wax, also in the fluid state, and mix them all thoroughly.	

USE.—Applied to the chest for Hooping Cough; also in cases of Hysteria and Flatulency.

EMPLASTRUM BELLADONNÆ.

LONDON.	EDINBURGH.	DUBLIN.
Extract of Belladonna, Plaster of Soap—of each, 3oz.	Extract of Belladonna - 1½oz. Resin Plaster - - - 3oz.	AVOIRDUPOIS WEIGHT. Extract of Belladonna - 1oz. Resin Plaster - - - 2oz.
Add the extract to the plaster, melted by the heat of a water bath; mix, constantly stirring until it is of a proper consistence.	Liquefy the plaster with a gentle heat; add the extract, and agitate briskly.	Melt the plaster by the heat of a steam or water bath; then add the extract, and mix them intimately.

Remarks.—The plaster of the London College is twice as strong of Belladonna as the Edinburgh and Dublin: it was, like the other two, in Pharm. L. 1836. The new plaster does not adhere so well as the former one did.

USE.—As an Anodyne and Antispasmodic; applied also in Neuralgia.

It is best prepared at the time required, and spread with a moderately warmed iron.

EMPLASTRUM CALEFACIENS.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Plaster of Spanish Flies - ½ lb. Burgundy Pitch - - 5½ lb.
		Melt them together by means of a steam or water bath, and, withdrawing the heat, stir constantly until the mixture stiffens.

This plaster was formerly employed by the London College, but has been omitted in the two last Pharmacopœias.

EMPLASTRUM CANTHARIDIS.

LONDON.	EDINBURGH.	DUBLIN.
Cantharides, in very fine powder - - - - - - 1 lb. Wax, Suet - - - - of each 7½oz. Resin - - - - - - 3oz. Lard - - - - - - - 6oz.	Cantharides, in very fine powder, Bees' Wax, Suet, Resin - - - - of each 2oz.	Spanish Flies, in very fine powder - - - - - 6oz. Yellow Wax, Prepared Lard, Resin - - - - of each 4oz.
To the wax, suet, and lard, liquefied together, add the resin, previously melted; then remove them from the fire, and a little before they concrete, sprinkle in the cantharides, and mix.	Liquefy the fats, remove from the heat, sprinkle in the cantharides, and stir briskly as the mixture concretes on cooling.	To the wax, resin, and lard, previously melted together by a steam or water heat, add the Spanish Flies, and stir the mixture constantly until the plaster is cool.

Remarks.—The Edinburgh plaster contains less Flies than the London or Dublin; the two latter are about the same strength. The London and Dublin are alike in strength, viz., one-third Cantharides; the Edinburgh weaker, viz., one-fourth. The London is soft, and may be spread with the fingers, or cold spatula; the Edinburgh, however, is of a very stiff consistence. Oiled tissue paper, or very thin silk, is sometimes placed between the plaster and the skin, to prevent irritant action on the urinary organs.

EMPLASTRUM CANTHARIDIS COMPOSITUM.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Venice Turpentine - - 4½oz. Burgundy Pitch, and Cantharides - - of each 3oz. Bees' Wax - - - - - 1oz. Verdigris - - - - - ½oz. White Mustard Seed, and Black Pepper—of each - ʒii.	Not in Pharm.
	Liquefy the wax and Burgundy pitch; add the turpentine, and while the mixture is hot, sprinkle into it the remaining articles, previously in fine powder, and mixed together. Stir the whole briskly, as it concretes in cooling.	

The merits of this plaster appear questionable. Dr. Duncan considers it infallible, whilst Dr. Christison says it is seldom used, and possesses no advantage over the simple plaster.

EMPLASTRUM CUMINI.

LONDON.	EDINBURGH.	DUBLIN.
Cummin Seeds, Carraway Seeds, Bay Berries - - of each 3oz.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Prepared Burgundy Pitch, 3 lb.		
Wax - - - - - - 3oz.		
Olive Oil, Water - - - each 1½ fl. oz.		
To the pitch and wax, melted together, add the oil and water, with the dry constituents rubbed to powder; then evaporate to a proper consistence.		

The addition of Olive Oil and water was made to this plaster of the last century in the Pharm. 1824. The Pharm. L. of 1836 did not contain Emplastrum Cumini, probably on account of its being seldom employed.

EMPLASTRUM FERRI.

Sesquioxide of Iron - - 1oz.	Red Oxide of Iron - - 1oz.	Peroxide of Iron, in fine powder - - - - - - 1oz.
Plaster of Lead - - - 8oz.	Litharge Plaster - - 3oz.	Litharge Plaster - - - 8oz.
Prepared Frankincense - 2oz.	Resin - - - - - - ʒvi.	Burgundy Pitch - - - 2oz.
	Olive Oil - - - fl. ʒiiiss.	
	Bees' Wax - - - - ʒiii.	
Sprinkle the sesquioxide into the plaster and frankincense, melted together over a slow fire, and mix.	Triturate the oxide of iron with the oil, and add the mixture to the other articles, previously liquefied by gentle heat; mix the whole thoroughly.	Add the peroxide of iron to the Burgundy pitch and litharge plaster, previously melted together, and stir the mixture constantly until it stiffens on cooling.

This is the so called Roborans, Pharm. Ed., or Empl. Thuris of Dublin.

USE.—As a strengthening plaster to afford mechanical support to relaxed muscles.

EMPLASTRUM GALBANI.

	Emp. Gummosum.	Not in Pharm.
Prepared Galbanum - - 8oz.	Litharge Plaster - - - 4oz.	
Plaster of Lead - - - 3 lb.	Ammoniac, Galbanum, and Bees' Wax - - of each ½oz.	
Turpentine (Venice) - - 1oz.		
Prepared Frankincense - 3oz.		
Add first the frankincense, then the plaster, melted over a slow fire, to the galbanum and turpentine liquified together, and mix them all.	Melt the gum-resins together, and strain them; melt also together the plaster and wax; add the former to the latter mixture, and mix the whole thoroughly.	

USE.—Applied to scrofulous and indolent tumours.

EMPLASTRUM HYDRARGYRI.

Mercury - - - - - 3oz.	Mercury - - - - - 3oz.	Mercury - - - - - 6oz.
Plaster of Lead - - - 1 lb.	Litharge Plaster - - - 6oz.	Litharge Plaster - - - 12oz.
Olive Oil - - - - - fl. ʒi.	Olive Oil - - - - fl. ʒ ix.	Oil of Turpentine - 1 fl. oz.
Sulphur - - - - 8 grains.	Resin - - - - - - - 1oz.	Resin - - - - - - 2oz.
Add the sulphur gradually to the heated oil, stirring constantly with a spatula until	Liquefy together the oil and resin, let them cool, add the mercury, and triturate till its	Dissolve the resin in the turpentine with the aid of heat; add the mercury, and rub

LONDON.	**EDINBURGH.**	**DUBLIN.**
	CONTINUED.	AVOIRDUPOIS WEIGHT.
they unite; afterwards rub the mercury with them, until globules are no longer visible; then gradually add the plaster of lead, melted over a slow fire, and mix them all.	globules disappear; then add to the mixture the plaster, previously liquefied, and mix the whole thoroughly.	them together until metallic globules cease to be visible, and the mixture assumes a dark gray colour; then add the litharge plaster, previously melted, and stir the mixture constantly until it stiffens on cooling.

The London plaster is one-fifth Mercury; the Edinburgh and Dublin between one-third and one-fourth, consequently stronger.

USE.—A discutient in glandular enlargements, and other swellings.

EMPLASTRUM LITHARGYRI.

Vide Emplastrum Plumbi.

EMPLASTRUM OPII.

Extract of Opium - - 1oz.	Powder of Opium - - - ½oz.	Opium, in very fine powder, 1oz.
Plaster of Lead - - - 8oz.	Litharge Plaster - - - 12oz.	Resin Plaster - - - - 9oz.
Prepared Frankincense - 2oz.	Burgundy Pitch - - - 3oz.	
Boiling Water - - - 1 fl. oz.		
To the liquefied frankincense add the plaster, melted over a slow fire, and the extract, previously mixed with the water, constantly stirring; evaporate over a slow fire to a proper consistence.	Liquefy the plaster and pitch; add the opium by degrees, and mix them thoroughly.	Melt the plaster by means of a steam or water bath; then add the opium by degrees, and mix thoroughly.

The London has 1 ounce of Opium in 11 ounces of plaster; the Edinburgh 1 in 31; the Dublin 1 in 10.
The Ph. L. of 1836 was exactly like the present Edin., viz. one-third of the present strength.

USE.—As an Anodyne application in local pains.

EMPLASTRUM PICIS.

Prepared Burgundy Pitch, 2 lb.	Burgundy Pitch - - - 1½ lb.	Not in Pharm.
Prepared Frankincense - 1 lb.		
Resin, Wax - - - - of each 4oz.	Resin, and Bees' Wax - - - of each 2oz.	
Expressed Oil of Nutmeg, 1oz.	Oil of Mace - - - - ½oz.	
Olive Oil, and Water - - - of each 2 fl. oz.	Olive Oil - - - - 1 fl. oz. Water - - - - - 1 fl. oz.	
Add the oils and water to the frankincense, pitch, resin, and wax, previously melted together; then, constantly stirring, evaporate to a proper consistence.	Liquefy the pitch, resin, and wax with a gentle heat; add the other articles; mix them well together, and boil till the mixture acquires the proper consistence.	

USE.—A stimulating plaster in chronic catarrhal complaints, and in chronic rheumatism.

EMPLASTRUM PLUMBI.

	Empl. Lithargyri.	*Empl. Lithargyri.*
Oxide of Lead (Litharge) reduced to very fine powder. 6 lb.	Litharge, in fine powder 5oz.	Litharge, in very fine powder, 5 lb.
Olive Oil - - - 1 gallon.	Olive Oil - - - 12 fl. oz.	Olive Oil - - - 1 gallon.
Water - - - - - 2 pints.	Water - - - - - 3 fl. oz.	Water - - - - - 2 pints.

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN AVOIRDUPOIS WEIGHT.
Boil them together over a slow fire, constantly stirring until the oil and oxide of lead unite into the consistence of a plaster; but it will be proper to add a little boiling water, if nearly the whole of that which was used in the beginning should be consumed before the end of the boiling.	Mix them; boil and stir constantly till the oil and litharge unite, replacing the water if it evaporate too far.	Boil all the ingredients together over a gentle fire, stirring constantly until the oil and litharge acquire such consistence that they will solidify on cooling. Towards the close of the process a little boiling water should be added to supply the place of that which has disappeared.

London and Dublin are alike, 5 lbs. Avoirdupois being equal to 6 lbs. Troy. Edinburgh orders rather less Oil.

USE.—Chiefly used as a basis for other plasters.

EMPLASTRUM POTASSII IODIDI.

LONDON.	EDINBURGH.	DUBLIN
Iodide of Potassium - 1oz.	Not in Pharm.	Not in Pharm.
Prepared Frankincense - 6oz.		
Wax - - - - - - - ℥ vi.		
Olive Oil - - - - fl. ℥ ii.		
To the frankincense and wax melted together, add the iodide first triturated with the oil, and stir constantly until they cool. This plaster is to be spread on linen rather than leather.		

Now introduced for the first time in the London Pharm.

EMPLASTRUM RESINÆ.

LONDON.	EDINBURGH. *Emplastrum Resinosum.*	DUBLIN
Resin - - - - - - ½ lb.	Resin - - - - - - - 1oz.	Resin, in powder - - - 4oz.
Plaster of Lead - - - 3 lb.	Litharge Plaster - - - 5oz.	Litharge Plaster - - - 2 lb.
		Castile Soap, in powder - 2oz.
Melt the resin, add it to the plaster, melted over a slow fire, and mix.	Melt them together with a moderate heat, and stir the mixture well till it concretes on cooling.	To the litharge plaster, previously melted over a gentle fire, add the resin and soap, and mix them intimately.

London contains rather less Resin than Edinburgh. Dublin contains Soap, and the least proportion of Resin.

USE.—Chiefly for strapping wounds and ulcers. The Dublin is a substitute for the Empl. Sapon. Comp. of the P. D. 1826.

EMPLASTRUM SAPONIS.

LONDON.	EDINBURGH.	DUBLIN
Soap (white Castile), sliced, ½ lb.	Castile Soap, in shavings, 1oz.	Castile Soap, in powder - 4oz.
Plaster of Lead - - - 3 lb.	Litharge Plaster - - - 4oz.	Litharge Plaster - - 2½ lb.
Resin - - - - - - - 1oz.	Gum Plaster - - - - 2oz.	
To the plaster, melted by a slow heat, add the soap and resin, first liquefied; then, constantly stirring, evaporate to a proper consistence.	Melt the plasters together with a moderate heat; add the soap and boil for a little.	To the plaster, previously melted over a gentle fire, add the soap, and heat them together until they are thoroughly incorporated.

Resin is now added to the London formula, doubtless to make it more adhesive. The proportions of Soap to the plaster is the same in London and Edinburgh. In the Dublin form, considerably less Soap is used.

EMPLASTRUM SIMPLEX.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Bees' Wax - - - - 3oz. Suet, Resin - - - - of each 2oz. Melt them together with a moderate heat, and stir the mixture briskly till it concretes on cooling.	AVOIRDUPOIS WEIGHT. Not in Pharm.

This resembles the Emplastrum Ceræ of Pharm. L. 1836.

EMPLASTRUM THURIS.

Vide Emplastrum Ferri.

ENEMA ALOES.

Aloes - - - - - - - ℈ii. Carbonate of Potash, 15 grains. Decoction of Barley - ½ pint. Mix and rub them together.	Not in Pharm.	Not in Pharm.

USE.—Employed in dislodging Ascarides from the Rectum; also a useful stimulating cathartic in the constipation of Amenorrhœa.

ENEMA ASSAFŒTIDÆ.

	Enema Fœtidum.	*Enema Fœtidum.*
Prepared Assafœtida - - ʒi. Decoction of Barley - ½ pint. Rub the Assafœtida with the decoction added gradually, until they are exceedingly well mixed.	Add to the Cathartic Enema, (which follows), ʒii. of Tincture of Assafœtida.	Tincture of Assafœtida, fl. ʒii. Warm Water - - - - 12oz. Mix.

USE.—Administered as an antispasmodic, and for the purpose of removing flatulency.

ENEMA CATHARTICUM.

Not in Pharm.	Olive Oil - - - - - 1oz. Sulphate of Magnesia - ½oz. Sugar - - - - - - 1oz. Senna - - - - - - ½oz. Boiling Water - - 16 fl. oz. Infuse the Senna for an hour in the water; then dissolve the salt and sugar; add the oil, and mix them by agitation.	Olive Oil - - - - 1 fl. oz. Sulphate of Magnesia - 1oz. Mucilage of Barley - 16 fl. oz. Dissolve the sulphate of magnesia in the mucilage; add the oil, and mix.

USE.—As its name implies, it is a useful Cathartic for general purposes.

ENEMA COLOCYNTHIDIS.

Extract of Colocynth - ʒ ss. Soft Soap - - - - - 1oz. Water - - - - - 1 pint. Mix and rub together.	Not in Pharm.	Not in Pharm.

The Pharm. L. 1836, ordered 2 scruples of Extract to this quantity of fluid.

USE.—A very efficient enema in cases of obstinate constipation and colic.

ENEMA OPII.

LONDON.	EDINBURGH.	DUBLIN.
	Vel *Enema Anodynum.*	AVOIRDUPOIS WEIGHT. Not in Pharm.
Decoction of Starch - 4 fl. oz.	Starch - - - - - - ʒ ss.	
Tincture of Opium, 30 minims.	Tincture of Opium, fl. ʒ ss. to ʒ i.	
	Water - - - - - 2 fl. oz.	
Mix.	Boil the starch in the water, and when it is cool enough for use, add the tincture of opium.	

USE.—The bulk of this enema is *small*, that it may be retained a sufficient length of time to act as an anodyne.

ENEMA TABACI.

Tobacco Leaf - - - - ℈i.	Tobacco - 15 grains to ʒ ss.	Tobacco Leaf - - - - ℈i.
Boiling Water - - - ½ pint.	Boiling Water - - 8 fl. oz.	Boiling Water - - - - 8oz.
Macerate for an hour, and strain.	Infuse for half an hour, and then strain.	Infuse for one hour in a covered vessel, and strain.

The quantity in Pharm. L. 1836, was half a drachm to half a pint, but this has been diminished, probably on account of the danger of half a drachm being administered at one time: for this reason it is to be regretted that the Edinburgh College has not been more definite as to quantity.

USE.—In Strangulated Hernia, obstinate constipation and retention of Urine.

ENEMA TEREBINTHINÆ.

Oil of Turpentine - 1 fl. oz.	Oil of Turpentine - 1 fl. oz.	Oil of Turpentine - - 1 fl. oz.
The yolk of one Egg.	Yolk of Egg, a sufficiency.	Mucilage of Barley - 16 fl. oz.
Decoction of Barley, 19 fl. oz.	Water - - - - - 19 fl. oz.	
Rub the oil with the yolk of egg, and gradually add the decoction.	Rub the oil and yolk carefully together, and then add the water gradually.	Mix.

USE.—Administered in peritonitis, and for intestinal worms.

ESSENTIA ANISI.

Not in Pharm.	Not in Pharm.	Oil of Anise - - - - 1 fl. oz.
		Rectified Spirit - - 9 fl. oz.
		Mix with agitation.

DOSE.—20 to 40 minims.

ESSENTIA CARUI.

Not in Pharm.	Not in Pharm.	Oil of Caraway - - 1 fl. oz.
		Rectified Spirit - - 9 fl. oz.
		Mix with agitation.

DOSE.—1 drachm to 2 drachms.

ESSENTIA CINNAMOMI.

Not in Pharm.	Not in Pharm.	Oil of Cinnamon - - 1 fl. oz.
		Rectified Spirit - - 9 fl. oz.
		Mix with agitation.

DOSE.—20 to 30 minims.

ESSENTIA FŒNICULI.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Oil of Fennel - - - 1 fl. oz. Alcohol - - - - - 9 fl. oz. Mix with agitation.

DOSE.—20 to 30 minims.

ESSENTIA MENTHÆ PIPERITÆ.

Not in Pharm.	Not in Pharm.	Oil of Peppermint - 1 fl. oz. Stronger Spirit - - 9 fl. oz. Mix with agitation.

DOSE.—20 to 60 minims.

ESSENTIA MENTHÆ PULEGII.

Not in Pharm.	Not in Pharm.	Oil of Pennyroyal - 1 fl. oz. Rectified Spirit - - 9 fl. oz. Mix with agitation.

DOSE.—20 to 60 minims.

ESSENTIA MENTHÆ VIRIDIS.

Not in Pharm.	Not in Pharm.	Oil of Spearmint - - 1 fl. oz. Stronger Spirit - - 9 fl. oz. Mix with agitation.

DOSE.—20 to 60 minims.

ESSENTIA MYRISTICÆ MOSCHATÆ.

Not in Pharm.	Not in Pharm.	Oil of Nutmeg - - 1 fl. oz. Stronger Spirit - - 9 fl. oz. Mix with agitation.

DOSE.—20 to 60 minims.

ESSENTIA PIMENTÆ.

Not in Pharm.	Not in Pharm.	Oil of Pimenta - - 1 fl. oz. Rectified Spirit - - 9 fl. oz. Mix with agitation.

DOSE —30 to 60 minims.

ESSENTIA ROSMARINI.

Not in Pharm.	Not in Pharm.	Oil of Rosemary - - 1 fl. oz. Rectified Spirit - - 9 fl. oz. Mix with agitation.

DOSE.—10 to 30 minims.

EXTRACTUM ACONITI.

LONDON.	EDINBURGH.	DUBLIN.
Fresh Leaves of Aconite, 1 lb.	Leaves of Monkshood, fresh, any convenient quantity.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Bruise them in a stone mortar; then press out the juice, and evaporate it, unstrained, to a proper consistence.	Beat them into a pulp; express the juice; subject the residuum to percolation with rectified spirit, so long as the spirit passes materially coloured; unite the expressed juice and the spirituous infusion; filter; distil off the spirit, and evaporate the residuum in the vapour bath, taking care to remove the vessel from the heat so soon as the due degree of consistence shall be attained.	

Dr. Neligan in his excellent work on medicines, states, " As Aconite leaves yield their active principles almost entirely to Alcohol, and but very partially to water, the Edin. preparation only can be active." If experience in the use of the London Extract had not sufficiently proved its activity, the fact that Aconitina is held in solution by its natural Acid in the juices of the plant would have been a sufficient guarantee of its efficacy without the aid of Spirit. The Spirit, however, precipitates much of the Vegetable matter, and the Edin. Extract is consequently so much the stronger.

DOSE of London 2 grains to 8 grains.—EDIN. probably half that of London.

USE.—In acute Rheumatism and in Gastrodynia. It also diminishes the expectoration in Phthisis.

EXTRACTUM ALOES.

	Not in Pharm.	*Extract. Aloes Aquosum.*
Socotrine Aloes - - - 15oz. Boiling Distilled Water, 1 gallon.		Hepatic Aloes, in coarse powder - - - - - - 4oz. Water - - - - - 2 pints.
Macerate with a gentle heat for three days; afterwards strain and set aside, that the dregs may subside; pour off the clear liquor, and evaporate it to a proper consistence.		Boil the Aloes until it is dissolved; when the solution is cold, and the dregs have subsided, pour off the clear liquid, and evaporate it to a proper consistence.

The object of this process is to separate the resinous matter, which *cold* water effects.

DOSE.—From 1 to 5 grains in a pill, occasionally with Mastich, and is much prescribed in London, its properties being less drastic, stimulating, and griping.

Dr. Wedekind is of opinion that the operation of Aloes depends on the increased secretion of bile, which is produced by the specific action of this medicine on the Liver. Moreover, he found that as long as the stools were white or gray in icterus, the Aloes did not purge even when given in large doses. In such cases, may not Ox Gall be advantageously prescribed with the Aloes?

EXTRACTUM ALOES BARBADENSIS.

Prepare this in the same manner in which Extract of Aloes has been directed to be prepared.	Not in Pharm.	Not in Pharm.

DOSE.—Rather less than Extract. Aloes, being more energetic.

EXTRACTUM ANTHEMIDIS.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Chamomile (Simple Flowers,) 1 lb. Boil it with a gallon of water down to 4 pints; filter the liquid hot; evaporate in the vapour bath to due consistence.	AVOIRDUPOIS WEIGHT. Not in Pharm.

The juice of the whole plant taken during inflorescence, and evaporated at a low temperature, would be preferable to the above, as it would retain much of its aroma.

DOSE.—10 to 30 grains, as a bitter tonic.

EXTRACTUM BELLADONNÆ.

Prepare this in the same manner as directed for Extract of Aconite.	Belladonna, fresh, any convenient quantity; bruise it in a marble mortar into a uniform pulp; express the juice; moisten the residuum with water, and express again. Unite the express fluids, filter them, and evaporate the filtered liquid in the vapour bath to the consistence of firm Extract, stirring constantly towards the close.	Fresh Belladonna Leaves, collected when the plant begins to flower, any convenient quantity; crush them in a mortar, express the juice, and allow it to stand for 24 hours. Pour off the clear liquor, and set it aside for subsequent use; and having placed the sediment on a calico filter, wash it with an equal bulk of distilled water, and mix the washings with the decanted liquor. When, by the application of a water heat, coagulation has occurred, skim off the coagulated matter, filter the hot liquid through flannel, mix in now the washed sediment, and evaporate to the consistence of a firm Extract, by a steam or water bath, constantly stirring, particularly towards the close of the evaporation.

The London Extract has now no addition of water, but consists of the juice and fæcula of the plant. The Edinburgh orders water, and removes the fæcula by filtration.

The lengthened directions of the Dublin College ought to have advantages over the other Colleges. The *first* step, however, in the process *during hot weather*, would allow incipient fermentation, and perhaps ruin the future product. The washing of the fecula is another great objection, and tends to no purpose, since it is afterwards added to the Extract. It may be said that this is to remove *entirely* the Albumen; but I can speak from long experience, that, except in very wet seasons, this principle need never be removed at all.

USE.—Externally rubbed on the eyelid to dilate the pupil; in ointment, liniment, or plaster, to allay pain.

DOSE.—London and Dublin, one quarter of a grain to one and half grain; Edinburgh, one-third of a grain to one grain, given in minute doses, said to be a preventive against infection of Scarlatina.

EXTRACTUM CANNABIS INDICÆ PURIFICATUM.

Not in Pharm.	Not in Pharm.	Extract of Indian Hemp of Commerce - - - - 1oz. Rectified Spirit - - 4 fl. oz. Dissolve the Extract in the Spirit, and when the dregs

LONDON.	EDINBURGH. CONTINUED.	DUBLIN. AVOIRDUPOIS WEIGHT.
Not in Pharm.	Not in Pharm.	have subsided, decant the clear liquid, and evaporate, by means of a water bath, to the consistence of a soft extract.

The Extract of Hemp is very variable in its strength, in consequence of being prepared sometimes with water, sometimes with spirit of different strengths. The object of the Dublin College is to make it uniform, by rejecting every thing that rectified spirit will not dissolve.

When Dr. O'Shaughnessy consigned all the dried plant he first imported to me, I converted it into Alcoholic Extract; but suggested to him, whether, if my process could be followed in Calcutta, that great advantage would result in having the plant recently dried to operate upon, uninjured by the long voyage in the hold of a vessel. He adopted the idea, and the Extract so prepared, and sent by Overland Mail, proved to be *three times the strength* of that prepared from the imported plant.

DOSE.—One-third of a grain to 1 or even 3 grains in pill or tincture, in Tic Doloreux and other painful affections.

EXTRACTUM CINCHONÆ.

Ext. Cinch. Cordifoliæ, Ph. 1836. Yellow Bark, coarsely bruised, 3 lbs. Distilled Water - 6 pints. Add 4 pints of water to the cinchona bark, and stir constantly with a spatula until the bark is moistened throughout; macerate for 24 hours, and strain through linen. What remains, macerate in the remaining water for 24 hours, and strain; then evaporate the mixed liquors to a proper consistence.	Any of the varieties of Cinchona, but especially the Yellow or Red Cinchona, in fine powder - - - 4oz. Proof Spirit - - 24 fl. oz. Percolate the cinchona with the spirit; distil off the greater part of the spirit, and evaporate what remains in an open vessel over the vapour bath to a due consistence.	Not in Pharm.

In former Pharmacopœias, Pale Bark was considered to be the *Cinchona Bark*, but now the London College gives *that name* to the Yellow Bark; and the Edinburgh College seems to have a preference for the yellow or red varieties, perhaps on account of the larger amount of Quinine contained in them. The Extracts of Bark are seldom employed; and now the concentrated infusions are introduced into the London Pharm., will probably be still less prescribed.

DOSE.—5 grains and upwards.

EXTRACTUM CINCHONÆ PALLIDÆ.

Extract. Cinchonæ Lancifoliæ. Ph. 1836.	*Vide* Extract. Cinchonæ.	Not in Pharm.

EXTRACTUM CINCHONÆ RUBRÆ.

Extract. Cinchonæ Oblongifoliæ, Ph. 1836. This Extract, as also the Ext. Cinch. Pallid., are to be prepared in the same manner as has been directed in Ext. Cinchonæ.	*Vide* Extract. Cinchonæ.	Not in Pharm.

EXTRACTUM COLCHICI.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Ext. Colchici Corm. 1836. Fresh Colchicum Corms 1 lb. Take away the outer coat of the corms, and proceed in the manner directed for Extract of Aconite.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.

According to these instructions, the juice and starch will be evaporated together; the latter might conveniently have been rejected, as it so soon subsides.

DOSE.—1 to 2 grains, and is sometimes given in the place of the Acetic Extract with equal success.

EXTRACTUM COLCHICI ACETICUM.

Fresh Colchicum Corms 1 lb. Acetic Acid - - - 3 fl. oz. (30·8 *per cent.*)	Fresh Bulb of Colchicum 1 lb. Pyroligneous Acid - 3 fl. oz. (21 *per cent.*)	Colchicum Root, dried - 4oz. Dilute Acetic Acid - 8 fl. oz. (28 *per cent.*)
Bruise the corms, the outer coating being removed, gradually sprinkle them with the acetic acid; then press out the juice, and, unstrained, evaporate to a proper consistence.	Beat the colchicum to a pulp, gradually adding the acid; express the liquid, and evaporate it in a porcelain vessel (not glazed with lead) over the vapour bath to the due consistence.	Digest the root in the acid for 14 days, then filter, and evaporate by means of a water bath, to the consistence of a soft extract.

The London and Edinburgh employ the fresh Corms; and as no filtration is ordered, the starch is embodied in the Extract. The Dublin uses the dried Corms, and orders filtration; which of course excludes the starchy matter. In the original formula of Dr. Scudamore, dried Corms and Acetic Acid were used for the Extract; he frequently prescribed it with Dover's powder, to relieve painful gout.

DOSE.—From 1 to 3 grains, in form of pill.

EXTRACTUM COLOCYNTHIDIS.

Colocynth cut in pieces, rejecting the seeds - 3 lbs. Distilled Water - ½ gallon.	Colocynth - - - - 1 lb. Water - - - - 2 gallons.	Not in Pharm.
Macerate the colocynth for 36 hours, frequently pressing it with the hand. Strongly press out the liquor, and strain; lastly, evaporate to a proper consistence.	Boil gently for 6 hours, replacing the evaporated water occasionally. Strain the liquor while hot, and evaporate it in the vapour bath to the due consistence.	

The formula of Pharm. Lond. of 1836, was exactly what the Edin. now is, and proved a complete failure; the large quantity of slimy matter taken up by the water gave an inconvenient consistence to the Extract, and soon caused it to become mouldy. The present formula orders barely enough water to wet the pulp thoroughly, and only about one-fourth of the fluid can be recovered by pressure; and this, on evaporation gives of Extract = one-eighth part by weight of the Colocynth pulp employed. I have found by experiment that Proof Spirit answers better; and perceiving a formula directing spirit in the place of water in the New Prussian Pharmacopœia, I have thought desirable to print it.

Colocynth, freed from the seed, and cut in coarse pieces . . . . . 1 *lb.*
Pour on this, Rectified Spirit . . . . 6 *lb.*
Digest, frequently stirring, for some days in a lukewarm place, and press out strongly.
Pour on the expressed pulp, Proof Spirit . . . . . . 5 *lb.*

Digest again for 24 *hours, with frequent shaking, and press. Clear the mixed liquids, by decantation and straining, and evaporate in a vapour bath, which must not exceed* 167° *Fahr., under constant stirring, to a pill-mass consistence. Take out the mass, dry it completely by a gentle heat, powder, and preserve it carefully.*

I find that Colocynth pulp treated by this process yields very nearly one-third of its weight.

EXTRACTUM CONII.

LONDON.	EDINBURGH.	DUBLIN
Prepare this in the same manner as Extract of Aconite is directed to be prepared.	Conium, any convenient quantity; beat it into a uniform pulp in a marble mortar, express the juice, and filter it. Let this juice be evaporated to the consistence of a very firm Extract, either in a vacuum with the acid of heat, or spontaneously in shallow vessels exposed to a strong current of air freed of dust by gauze skreens.	AVOIRDUPOIS WEIGHT. Fresh Hemlock Leaves, collected when the plant begins to flower, any convenient quantity. The method of preparation is the same as for Extractum Belladonnæ.

TEST.—This Extract is of good quality, only when a very strong odour of Conia is disengaged by degrees on its being carefully triturated with Liquor Potassæ.

In the London process, the fæcula is retained; in the Edinburgh rejected; in the Dublin retained, but the albumen separated. Some writers consider this Extract an uncertain one, and with reason, as the manipulation carelessly performed materially deteriorates the product; but I am sure, that if the juice be expressed from the plant (when half the flowers have fully blown), and it be evaporated without delay at a low temperature to a proper consistence, the Extract will keep quite well for two years, should it be a favourable season.

DOSE.—3 to 5 grains, in a pill.

EXTRACTUM DIGITALIS.

LONDON.	EDINBURGH.	DUBLIN
Not in Pharm.	This Extract is best prepared from the fresh Leaves of Digitalis, by any of the processes indicated for Extract of Conium.	Not in Pharm.

It is little em[illegible]ed, the powder and tincture supplying its place.

DOSE.—Half a grain to 1 grain.

EXTRACTUM ELATERII vel ELATERIUM.

LONDON.	EDINBURGH.	DUBLIN
Fruit of Momordica Elaterium before it is quite ripe - 1 lb. Slice wild cucumber in the long direction and strain the juice, very gently expressed, through a very fine hair sieve; then set it aside for some hours, until the thicker part has subsided. The thinner supernatant fluid being rejected, dry the thicker portion with a gentle heat.	Fruit of Momordica Elaterium before it is quite ripe, any convenient quantity; cut the fruit and express the juice gently through a fine sieve; allow the liquid to rest till it becomes pretty clear; pour off the supernatant liquor, which may be thrown away, and dry the feculence with a gentle heat.	The Fruit of Momordica Elaterium, before it is quite ripe, any convenient quantity; cut the fruit and express the juice gently through a fine sieve; allow the liquid to rest until it becomes pretty clear; pour off the supernatant liquor, which may be thrown away, and dry the feculence with a gentle heat.

DOSE.—One-sixteenth of a grain. In passive dropsies, or ascites and hydrothorax, its administration in debilitated habits requires great caution.

TEST.—Colour pale gray; when exhausted by Rectified Spirit, the solution, concentrated and poured into hot diluted Liquor Potassæ, deposits on cooling, minute, silky, colourless crystals, weighing from one-seventh to one-fourth of the Elaterium.

EXTRACTUM GENTIANÆ.

LONDON.	EDINBURGH.	DUBLIN
Gentian Root, sliced - 3 lbs.	Gentian, any convenient quantity.	Gentian Root, in thin slices, 1 lb.
Distilled Water - - 6 pints.		Distilled Water - - 3 pints.
Macerate for 12 hours in 4 pints of water; pour off and strain the liquor; add 2 pints of water to the remainder,	Bruise it to a moderately fine powder; mix it thoroughly with half its weight of distilled water; in 12 hours put	Macerate the gentian in 1½ pint of the water for 6 hours, then strain and express; add to the residue the remaining

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
macerate for 6 hours, gently press out the liquor, and strain; lastly, evaporate the mixed liquors to a proper consistence.	it into a proper percolator, and exhaust it by percolation with temperate distilled water; concentrate the liquid, filter before it becomes too thick, and evaporate in the vapour bath to a due consistence.	1½ pint of water, macerate again for 6 hours, strain and express; finally, mix the liquors, and evaporate by a steam or water bath to a proper consistence.

DOSE.—10 to 20 grains twice a day in pills, either alone as a tonic bitter, or combined with Sulphate of Iron.

REMARKS.—Hot water was employed in the Pharm. L. 1836, which had the disadvantage of dissolving the Pectin contained in the root. The three Colleges now direct cold water, which extracts the bitter matters, and acts but little upon the Pectin. I find 3 lb. of Root yield about 1 lb. of Extract.

EXTRACTUM GLYCYRRHIZÆ.

LONDON.	EDINBURGH.	DUBLIN.
Fresh Liquorice Root, bruised, 2½lbs. Boiling Distilled Water 2 galls. Macerate for 24 hours, then boil down to a gallon, and strain the liquor while hot; lastly, evaporate to a proper consistence.	Cut Liquorice Root into small chips, dry it thoroughly with a gentle heat, reduce it to a moderately fine powder, and proceed as for Extract of Gentian.	Liquorice Root, in thin slices, dried and reduced to coarse powder - - - - - 1 lb. Distilled Water - 3 pints. The method of preparation is the same as for Extractum Gentianæ.

REMARKS.—The London College continues to order the fresh root and boiling water, and under these circumstances it is impossible to make an Extract, which, on being dissolved, shall be a bright solution. The Edinburgh and Dublin order dry root and cold water, which is decidedly preferable.

EXTRACTUM HÆMATOXYLI.

LONDON.	EDINBURGH.	DUBLIN.
Cut Logwood - - - 2½ lb. Boiling Distilled Water 2 galls. Prepare the Extract in the same manner in which it has been ordered concerning Extract of Liquorice.	Logwood, in fine chips - 1 lb. Boiling Water - - 1 gallon. Macerate for 24 hours, then boil down to 4 pints, strain, and concentrate in the vapour bath to the due consistence.	Not in Pharm.

DOSE.—From 10 to 30 grains in Aromatic Water, in Diarrhœa and Dysentery.

INCOMPATIBLES.—Alkalies, Salts of Iron.

EXTRACTUM HYOSCYAMI.

LONDON.	EDINBURGH.	DUBLIN.
Prepare this Extract in the same way in which we have ordered Extract of Aconite to be prepared.	This Extract is to be prepared from the fresh leaves of Hyoscyamus by any of the processes directed for Extract of Conium.	Fresh Hyoscyamus Leaves collected when the plant begins to flower, any convenient quantity. The method of preparation is the same as for Extract Belladonnæ.

DOSE.—2 to 5 grains in cases where Opium produces constipation, or combined with Colocynth to prevent griping, without diminishing its purgative power.

EXTRACTUM JALAPÆ.

LONDON.	EDINBURGH.	DUBLIN.
	Sive *Resina Jalapæ.*	AVOIRDUPOIS WEIGHT.
Bruised Jalap - - - 2½lbs. Rectified Spirit - 1 gallon. Distilled Water - 2 gallons. Macerate the jalap in the spirit for 4 days, and pour off the tincture; boil the residue in the water to half a gallon; then strain the tincture and decoction separately; let the latter be evaporated, and the former distil, until each thickens; lastly, mix the extract with the resin, and evaporate to a proper consistence. The extract should be kept *soft*, so as to form pills; and *hard*, that it may be rubbed to powder.	Any convenient quantity of jalap, in moderately fine powder; mix it thoroughly with enough of rectified spirit to moisten it well; put it for 12 hours into a percolator, and exhaust the powder with rectified spirit; distil off the greater part of the spirit, and concentrate the residuum over the vapour bath to a due consistence.	Not in Pharm.

The London Extract is a mixture of the watery and resinous; the Edinburgh the resinous alone. Mr. Brande states, that Jalap yields about 66 per cent. of Extract,—16 alcoholic and 50 watery. The London process, I find, gives about 50 per cent.

DOSE of London, 10 to 20 grains; Edinburgh, 3 to 6 grains, well divided by sugar or any simple powder, to prevent irritation and griping.

EXTRACTUM KRAMERIÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	This Extract is to be prepared from Krameria-root in the same way with that of Liquorice-root.	Not in Pharm.

DOSE.—20 to 40 grains, as an astringent and tonic medicine.

EXTRACTUM LACTUCÆ.

LONDON.	EDINBURGH.	DUBLIN.
Prepare this in the same manner in which we have ordered Extract of Aconite to be prepared.	Not in Pharm.	Not in Pharm.

DOSE.—5 to 10 grains, as an anodyne.

EXTRACTUM LUPULI.

LONDON.	EDINBURGH.	DUBLIN.
Hops - - - - - 2½ lbs. Boiling Distilled Water 2 galls. Prepare the Extract in the same manner in which we have ordered Extract of Liquorice to be prepared.	This Extract is prepared from Hops in the same way with the Extract of Logwood.	Not in Pharm.

This Extract is better prepared from the juice of the fresh green Hop.

DOSE of the London and Edinburgh preparation, 5 to 20 grains; if prepared from recent Hops, 3 to 5 grains.

EXTRACTUM NUCIS VOMICÆ.

LONDON.	EDINBURGH.	DUBLIN.
Nux Vomica - - - - 8oz. Rectified Spirit - - 3 pints.		AVOIRDUPOIS WEIGHT. Not in Pharm.
Apply watery vapour to the Nux Vomica, so that it may be softened; afterwards bruise the same cut into thin slices, and dry it; then macerate in 2 pints of spirit for 7 days, press out the tincture, and strain; what remains, macerate again in the remaining spirit for 3 days; then again press and strain; let the greater part of the spirit distil from the tinctures mixed together; let what remains be evaporated to a proper consistence.	Nux Vomica any convenient quantity; expose it in a proper vessel to steam till it is completely softened; slice it, dry it thoroughly, and immediately grind it in a coffee-mill; exhaust the powder either by percolating it with rectified spirit or by boiling it with repeated portions of rectified spirit, until the spirit comes off free of bitterness; distil off the greater part of the spirit, and evaporate what remains in the vapour bath to a proper consistence.	

Both preparations are Alcoholic Extracts, and of the same strength.

DOSE.—Half a grain, gradually increased to 3 grains, and divided minutely by Sugar of Milk, in pill or in powder. It is extensively employed as a tonic to the muscular system, and is by far the most approved of the strychnia preparations.

EXTRACTUM OPII.

LONDON.	EDINBURGH.	DUBLIN.
		Extractum Opii Aquosum.
Pounded Opium - - 1½lb. Distilled Water - - 5 pints.	Opium - - - - - - 1 lb. Water - - - - - - 5 pints.	Opium - - - - - - 1 lb. Water - - - - - - 6 pints.
Add gradually to the opium 2½ pints of water, and macerate for 24 hours, frequently stirring with a spatula; then strain; macerate what remains in the remaining water for 24 hours, and strain; lastly, evaporate the strained liquors to a proper consistence.	Cut the opium into small fragments, macerate it for 24 hours in a pint of water, break down the fragments with the hand, express the liquid with pretty strong pressure; break down the residuum again in another pint of the water, let it macerate for 24 hours, and express the liquid; repeat the maceration and expression in the same way till the water is all used; filter the successive infusions as they are made, passing them through the same filter; unite and evaporate them in the vapour bath to the due consistence.	Cut the opium into thin slices, macerate it for 24 hours in a quart of the water, and decant; macerate the residuum for 12 hours with a second quart of the water, decant, and repeat this process with the rest of the water, subjecting the insoluble residuum to strong expression; filter the successive infusions and expressed liquor, and evaporate them in a water bath to a proper consistence.

The resulting Extract of the three Colleges much the same in strength, although from the care taken by the Edinburgh and Dublin to press strongly before each maceration, a larger amount may be obtained.

The sedative properties of the Opium are by this process retained, whilst the narcotic and stimulating matters are rejected; it is therefore to be preferred to the common Opium.

DOSE.—Same as Opium.

EXTRACTUM PAPAVERIS.

LONDON.	EDINBURGH.	DUBLIN.
Bruised Poppy Capsules, rejecting the Seeds - 15oz. Boiling Distilled Water 1 gall.	Poppy Heads, without the Seeds - - - - - 15oz. Boiling Water - - 1 gallon.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Macerate for 24 hours, then boil down to 4 pints, and gently strain the liquor while hot; lastly, evaporate to a proper consistence.	Macerate for 24 hours; boil down to 4 pints; filter the liquor hot, and evaporate over the vapour bath to the due consistence.	

The Author prepared this Extract from the *fresh* and unripe capsules many years ago, which many prescribers prefer to the College Extract. The Edinburgh College stipulates that the capsules should *not* be quite ripe when gathered for drying.

DOSE.—2 to 10 grains as an anodyne.

EXTRACTUM PAREIRÆ.

LONDON.	EDINBURGH.	DUBLIN.
Prepare this in the same manner in which we have ordered Extract of Logwood to be prepared.	This Extract is to be prepared from Pareira-root in the same way with the Extract of Liquorice-root.	Not in Pharm.

DOSE.—10 to 30 grains, as an adjunct to the infusion.

EXTRACTUM QUASSIÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	This Extract is to be prepared from Quassia in the same way with the Extract of Liquorice-root.	Not in Pharm.

DOSE.—5 to 10 grains, in pill, as a tonic bitter.

EXTRACTUM RHEI.

LONDON.	EDINBURGH.	DUBLIN.
Bruised Rhubarb - - 15oz. Proof Spirit - - - 1 pint. Distilled Water - - 7 pints.	Rhubarb - - - - - 1 lb. Water - - - - - 5 pints.	Rhubarb, in thin slices - 1 lb. Water - - - - - 5 pints.
Macerate for 4 days; then strain and set by, that the dregs may subside; pour off the liquor, and evaporate it, when strained, to a proper consistence.	Cut the Rhubarb into small fragments, macerate it for 24 hours in 3 pints of the water, filter the liquor through a cloth, and express it with the hands or otherwise moderately; macerate the residuum with the rest of the water for 12 hours at least, filter the liquor with the same cloth as before, and express the residuum strongly; the liquors, filtered again if necessary, are then to be evaporated together to a proper consistence in the vapour bath. The Extract, however, is obtained of finer quality by evaporation in a vacuum with a gentle heat.	Macerate the Rhubarb for 24 hours in 3 pints of the water, filter the liquor through a cloth, and express; macerate the residuum with the rest of the water for 12 hours, filter the liquor through the cloth previously used, and express the residuum strongly. The liquors, filtered again if necessary, are to be mixed, and evaporated to a proper consistence in a water bath.

The London College directs spirit and water in the process; the Edinburgh and Dublin water only. By either process the properties of the Rhubarb are extracted; and if due care be taken to evaporate at a low temperature, and free from metallic contact, an Extract three times the strength of the powder may be obtained.

DOSE.—5 to 10 grains as a tonic aperient.

EXTRACTUM SARSÆ LIQUIDUM.

LONDON.	EDINBURGH.	DUBLIN
		AVOIRDUPOIS WEIGHT.
Sarsaparilla - - - 3½ lbs. Distilled Water - 5 gallons. Rectified Spirit - - 2 fl. oz.	Sarza, in chips - - - 1 lb. Boiling Water - - 6 pints.	Sarsaparilla - - - - 1 lb. Boiling Water - - 8 pints. Rectified Spirit, as much as is sufficient.
Boil the Sarsaparilla in 3 gallons of the water down to 12 pints; pour off the liquor and strain, while yet hot; again boil the Sarsaparilla in the remaining water down to half, and strain; evaporate the mixed liquors to 18 fluid ounces; and when the extract has cooled, add to it the spirit.	Digest the root for 2 hours in 4 pints of the water; take it out, bruise it, replace it, and boil for 2 hours; filter and squeeze out the liquid; boil the residuum in the remaining 2 pints of water, and filter and squeeze out this liquor also; evaporate the united liquors to the consistence of thin syrup; add, when the product is cool, as much rectified spirit as will make in all 16 fluid ounces; filter. This fluid Extract may be aromatized with volatile oils or warm aromatics.	Digest the Sarsaparilla in 5 pints of the water for 2 hours at a temperature near 212°, and then decant; add the rest of the water, digest again for 2 hours, and decant. Evaporate the mixed liquors by a steam or water heat to the consistence of a thin syrup, and, when the product has cooled, add as much rectified spirit as will make the entire 20 ounces.

The London College have introduced the liquid in the place of the solid Extract, which is decidedly preferable, and is in unison with the formula of the other Colleges, but is at the same time about three times stronger; for,

20 fluid oz contain the properties of 42oz. of Root.
Whilst in the Edinburgh, 20 „ „ 15oz. „
And in Dublin, 20 „ „ 14½oz. „

DOSE of the London, from a tea-spoonful to a dessert-spoonful three times a day; doubtless a valuable medicine when prepared with due care from Jamaica Sarsaparilla. The discordant opinions relative to this medicine have arisen probably from bad preparations or inferior Sarsaparilla.

EXTRACTUM SCAMMONII.

LONDON.	EDINBURGH.	DUBLIN
Not in Pharm.	*Sive* *Resina Scammonii.* Take any convenient quantity of Scammony in fine powder; boil it in successive portions of Proof Spirit till the spirit ceases to dissolve anything; filter: distil the liquid till little but water passes over. Then pour away the watery solution from the resin at the bottom; agitate the resin with successive portions of boiling water till it is well washed; and lastly, dry it at a temperature not exceeding 240°.	Not in Pharm.

Good Scammony would be deteriorated by this process; and if designedly sophisticated with Guaiacum and some other Gum-resins, they would still be retained. Inferior Scammony ought never to be admitted into respectable Dispensaries; the adulterations are pretty well known, and readily detected.

DOSE.—5 to 10 grains.

EXTRACTUM STRAMONII.

LONDON.	EDINBURGH.	DUBLIN.
Seeds of Thorn Apple - 15oz. Boiling Distilled Water 1 gall.	Seeds of Stramonium, any convenient quantity; grind them well in a coffee-mill.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Macerate for 4 hours in a vessel lightly covered, near the fire; afterwards take out the seeds and bruise them in a stone mortar; return them when bruised to the liquor. Then boil down to 4 pints, and strain the liquor while hot. Lastly, evaporate to a proper consistence.	Rub the powder into a thick mass with proof spirit; put the pulp into a percolator, and transmit proof spirit till it passes colorless; distil off the spirit, and evaporate what remains in the vapour bath to a proper consistence.	

Process of Edinburgh preferable, being less likely to become mouldy by keeping, and is a stronger preparation than the London.

DOSE.—From one-quarter of a grain, gradually increased.

EXTRACTUM STYRACIS.

Vide Styrax Præparata.

EXTRACTUM TARAXACI.

Prepare this in the same manner in which we have directed Extract of Liquorice to be prepared.	Fresh root of Taraxacum 1 lb. Boiling Water - - 1 gallon. Proceed as for the preparation of Extract of Poppy Heads.	Not in Pharm.

That this formula remains without alteration, is somewhat remarkable, since the preparation of Extracts has of late been the subject of much attention. The large quantity of water to the small quantity of root, and the time necessarily required to macerate and evaporate it, would materially change the properties and character of the Extract.

EXTRACTUM UVÆ URSI.

Prepare this in the same manner in which we have ordered Extract of Hop to be prepared.	Not in Pharm.	Not in Pharm.

DOSE.—5 to 15 grains two or three times a day.

FERRI AMMONIO-CHLORIDUM.

Sesquioxide of Iron - - 3oz. Hydrochloric Acid - ½ pint. Hydrochlorate of Ammonia, 2½ lbs. Distilled Water - - 3 pints. Mix the Sesquioxide with the Acid, and digest it in a sand-bath, frequently stirring, until it become liquified; then add the Hydrochlorate, first dissolved in the water; strain and evaporate the solution until the salt be dry. Rub this into powder.	Not in Pharm.	Not in Pharm.

DOSE.—5 to 15 grains, dissolved in any aromatic, but not *astringent* vehicle.

TEST.—Pulverulent; of an orange colour; is soluble in Proof Spirit and water; Potash being added to either solution, Ammonia is given off, and it throws down from 100 grains of this Salt, about 7 grains of the Sesquioxide of Iron.

FERRI AMMONIO-CITRAS.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Sulphate of Iron - - 12oz.	Not in Pharm.	Sulphate of Iron - - - 5oz.
Carbonate of Soda - 12½oz.		
Citric Acid - - - - 6oz.		Citric Acid - - - - 4oz.
Solution of Ammonia 9 fl. oz.		Solution of Ammonia 4 fl. oz. or as much as is sufficient.
Boiling distilled Water 12 pints		Distilled water - - - 16oz.
Dissolve the Sulphate and Carbonate separately in 6 pints of water. Mix the solutions, yet hot, and set by, that the precipitate may subside. The supernatant liquor being poured off wash the precipitate frequently with water, and, the acid being added, dissolve it by the aid of heat. Then, when it has cooled, add the Ammonia, and evaporate to the consistence of syrup. Dry this with a gentle heat, spread thinly on flat earthenware plates: and let it be kept in a well closed vessel.		Dissolve the Citric Acid in the Water with the aid of heat, and, having converted the Sulphate of Iron into the hydrated Peroxide of Iron as directed in the formula for *Ferri Peroxydum Hydratum*, introduce the product into the capsule containing the solution of Citric Acid, and boil for 20 minutes. When the solution has cooled, add, constantly stirring, the Ammonia in slight excess, and having transferred the solution thus obtained to delph dinner plates, evaporate it to dryness by a steam or water heat. Lastly, chip off the film of dry salt which adheres to the plates, and preserve it in well-stopped bottles.

By the process of the London College, the Iron is not completely converted into the Hydrated Peroxide; whereas by the Dublin process, the Hydrated Peroxide is expressly ordered: these two preparations must therefore differ; but the Ferri Ammonio-Citras of the shops agrees more with the Dublin than the London form. The London process may, however, yield a more efficacious preparation.

DOSE.—5 to 10 grains in some bitter infusion.

TEST.—Soluble in water. This solution neither changes the colour of Litmus nor Turmeric; neither is it made blue on the addition of Ferrocyanide of Potassium; but either Potash or Lime Water being added, Sesquioxide of Iron is thrown down and Ammonia evolved; from 100 grains dissolved in water, Potash being added, about 34 grains of Sesquioxide of Iron are precipitated.

As the Ferri et Quinæ Citras is now so much used, it is to be regretted that the London College has given no formula for its preparation, or even mentioned it. This I think should have been done, as the amount of Quina the Salt contains, varies very much according to the maker; it should, however, contain *at least* 20 per cent. of Citrate of Quinine.

FERRI CARBONAS.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Sulphate of Iron - - - 8oz.
		Crystallized Carbonate of Soda of Commerce - - - 10oz.
		Distilled Water - 2 gallons.
		Dissolve each salt in one-half of the water, and both solutions being raised to the boiling temperature, mix them, and set the whole to rest in a covered vessel for 6 hours. The supernatant solution having been drawn off with a syphon, the precipitate is to be drained on a calico filter, and then subjected to strong expression. Finally, let it be dried at a temperature not exceeding 212°, pulverized, and preserved in a well-stopped bottle.

FERRI CARBONAS CUM SACCHARO.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
	Ferri Carbonas Saccharatum.	*Ferri Carbonas Saccharatum.*
Sulphate of Iron - - - 4oz. Carbonate of Soda - - 4¼oz. Sugar - - - - - - - 2oz. Boiling Distilled Water, 4 pints.	Sulphate of Iron - - - 4oz. Carbonate of Soda - - 5oz. Pure Sugar - - - - 2oz. Water - - - - - 4 pints.	Sulphate of Iron - - - 8oz. Crystallized Carbonate of Soda of Commerce - - - 10oz. Refined Sugar, in fine powder, 4oz. Distilled Water - 2 gallons.
Dissolve separately the carbonate and sulphate in 2 pints of the water; mix together the solutions, yet hot, and place aside, that the carbonate of iron may be deposited; then, the supernatant fluid being poured off, wash the precipitated carbonate frequently with water. To this add the sugar dissolved in 2 fluid ounces of water, and evaporate the mixture in a water bath until the powder be dried. Keep it in a well-closed vessel.	Dissolve the Sulphate and Carbonate each in 2 pints of water; add the solutions and mix them; collect the precipitate on a cloth filter, and immediately wash it with cold water; squeeze out as much of the water as possible, and, without delay, triturate the pulp which remains, with the sugar previously in fine powder. Dry the mixture to a temperature not much above 120°.	With the Sulphate of Iron, Carbonate of Soda, and water, prepare, as directed in the preceding formula, a Carbonate of Iron, and immediately after it has been expressed, mix with it the refined sugar. Dry the mixture at a temperature not exceeding 212°, and, having reduced it to a fine powder, preserve it in a well-stopped bottle.

The continued washing with water that has *not* been deprived of air by boiling, will have the effect of decomposing the Protocarbonate of Iron, which it is the evident intention of the Colleges to retain unimpaired; therefore water recently boiled, and closed vessels, should have been directed.

DOSE.—5 to 30 grains, in form of powder.

FERRI IODIDUM.

Not in Pharm.	Take any convenient quantity of Iodine, Iron Wire, and Distilled Water in the proportion for making Solution of Iodide of Iron. (*Liquor Ferri Iodidi*).	Pure Iodine - - - - 1oz. Filings, or thin turnings of Wrought Iron, separated from impurities by a magnet, ½oz. Distilled Water - - - 5oz.
	Proceed as directed for that process; but, before filtering the solution, concentrate it to one-sixth of its volume, without removing the excess of Iron Wire, Put the filtered liquor quickly in an evaporating basin, along with twelve times its weight of quick lime around the basin, in some convenient apparatus in which it may be shut up accurately in a small space not communicating with the general atmosphere. Heat the whole apparatus in a hot air-press, or otherwise, until the water be en-	Introduce the Iodine, Iron, and 4oz. of the water, into a Florence flask, and, having heated the mixture gently for 10 minutes, boil until the solution loses its red colour. Pass the liquid now through paper into a second flask, washing the filter with the the remaining ounce of water, and, by means of a regulated heat, boil down the liquor until a drop of it taken out on the end of an iron wire solidifies on cooling. When the flask has assumed the temperature of the air, let the Iodide of Iron be ex-

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
	tirely evaporated; and preserve the dry Iodide in small well-closed bottles.	tracted from it (by breaking the flask if necessary,) and after it has been submitted to powerful pressure, enveloped in blotting paper, let it be enclosed in a well-stopped bottle.

The London College have now discontinued the formula for the solid form, and indeed it is only useful on account of its portability, since it is most advantageously administered in solution or in Syrup. The latter of these is to be found in the Pharmacopœia, and I think the former might have found a place also; for when a coil of iron wire is kept in it, its uniformity and neutrality is more secure than in the form of syrup, and the small amount of Peroxide of Iron generally found in it, need never be separated by filtration.

DOSE.—1 to 3 grains in solution, a most valuable tonic in scrofulous debility.

FERRI OXIDUM NIGRUM.

		Ferri Oxidum Magneticum.
Not in Pharm.	Sulphate of Iron - - - 6oz. Sulphuric Acid, (Commercial) fl. ʒii. and ℈ii. Pure Nitric Acid - fl. ʒivss. Stronger Aqua Ammoniæ 4½ fl. oz. Boiling Water - - 3 pints.	Sulphate of Iron - - 12oz. Solution of Caustic Potash, 54 fl. oz. Distilled Water a sufficient quantity.
	Dissolve half the Sulphate in half the boiling water, and add the Sulphuric Acid; boil; add the Nitric Acid by degrees, boiling the liquid after each addition briskly for a few minutes. Dissolve the rest of the Sulphate in the rest of the boiling water; mix thoroughly the two solutions; and immediately add the Ammonia in a full stream, stirring the mixture at the same time briskly. Collect the black powder on a calico filter; wash it with water till the water is scarcely precipitated by solution of Nitrate of Baryta; and dry it at a temperature not exceeding 180°.	Convert, as is directed in the formula for *Ferri Peroxidum Hydratum* 8oz. of the Sulphate of Iron into a Persulphate. To the solution thus obtained, add the 4 remaining ounces of the Sulphate of Iron, first dissolved in half a pint of distilled water. Mix well the resulting liquid with the solution of Caustic Potash, and having boiled for 5 minutes in an iron vessel, collect the precipitate on a calico filter, and wash it with boiling distilled water until the liquid which passes through ceases to give a precipitate when dropped into a solution of Chloride of Barium. Lastly, let the precipitate be dried by a steam or water heat, and, having been first reduced to a fine powder, let it be enclosed in a well-stopped bottle.

This preparation was in great repute with Dr. Jephson, and is certainly more to be depended upon than the Sesquioxide; it is the Ferroso-ferric Oxide of Berzelius, a compound of Protoxide and Sesquioxide of Iron.

DOSE.—5 to 20 grains two or three times a day.

TEST.—Dark grayish black powder; strongly attracted by the magnet; heat expels water from it; Muriatic Acid dissolves it entirely; and Ammonia precipitates a black powder from this solution.—EDIN.

FERRI OXIDUM RUBRUM.

Vide Ferri Sequioxidum.

FERRI OXIDUM RUBRUM HYDRATUM.

		AVOIRDUPOIS WEIGHT.
Not in Pharm.	*Ferrugo.*	*Ferri Peroxidum Hydratum.*
	Sulphate of Iron - - - 4oz. Sulphuric Acid (Commercial) fl. ʒiiiss. Nitric Acid (Sp. Gr. 1.380) fl. ʒ ix. Stronger Aqua Ammoniæ 3½ fl. oz. Water - - - - - 2 pints.	Sulphate of Iron - - - 8oz. Pure Sulphuric Acid - fl. ʒvi. Pure Nitric Acid - ½ fl. oz. Solution of Caustic Potash, 1 quart. Distilled Water - - 12oz.
	Dissolve the Sulphate in the water, add the Sulphuric Acid, and boil the solution; add then the Nitric Acid in small portions, boiling the liquid for a minute or two after each addition, until it acquires a yellowish brown colour, and yields a precipitate of the same colour with Ammonia. Filter; allow the liquid to cool; and add in a full stream the Aqua Ammoniæ, stirring the mixture briskly. Collect the precipitate on a calico filter; wash it with water till the washings cease to precipitate with Nitrate of Baryta; squeeze out the water as much as possible, and dry the precipitate at a temperature not exceeding 180°. When this preparation is kept as an antidote for poisoning with Arsenic, it is preferable to preserve it in a moist state, after being simply squeezed.	To 10oz. of the water add the Sulphuric Acid, and in the mixture with the aid of of heat, dissolve the Sulphate of Iron. Mix the Nitric Acid with the remainder of the water, and, having added the diluted acid to the solution of Sulphate of Iron, concentrate by boiling, until, upon the sudden disengagement of much gas, the liquid passes from a dark to a red colour. Let this be now poured into the solution of Caustic Potash, and, when the mixture has been well stirred, place it in a calico filter, and let the precipitate be washed with distilled water until the liquid which passes through ceases to give a precipitate when dropped into a solution of Chloride of Barium. Lastly, enclose the precipitate, while in the pasty state in a porcelain pot whose lid is made air-tight by a luting of lard, so as to prevent the loss of water by evaporation.

Chiefly given as an antidote to Arsenic in large doses, often repeated.

FERRI PEROXIDUM.

Vide Ferri Sesquioxidum.

FERRI PEROXIDUM HYDRATUM.

Vide Ferri Oxidum Rubrum Hydratum.

FERRI POTASSIO-TARTRAS.

LONDON.	EDINBURGH.	DUBLIN.
	Ferrum Tartarizatum.	AVOIRDUPOIS WEIGHT. *Ferrum Tartarizatum.*
Sulphate of Iron - - 4oz. Sulphuric Acid - - ½ fl. oz. Nitric Acid - - - 1 fl. oz. Solution of Ammonia, 10 fl. oz. Bitartrate of Potash, powdered, 2oz. Distilled Water - 4 gallons.	Sulphate of Iron - - - 5oz. Bitartrate of Potash 5oz. and ʒi. Carbonate of Ammonia, in fine powder, a sufficiency.	Sulphate of Iron - - - 8oz. White Bitartrate of Potash 5oz. Distilled Water - - 1½ pint.
Dissolve the Sulphate in a pint of water with the Sulphuric Acid; then, heat being applied gradually add the Nitric Acid. Boil the solution to the consistence of syrup and mix with the rest of the water; then add the Ammonia to throw down the Sesquioxide. Wash this, and place it aside for 24 hours; then heat the Bitartrate, mixed in half a pint of distilled water to the 140th degree, and to it gradually add the moist Sesquioxide, the supernatant water being poured off. Separate by means of a linen cloth whatever of this oxide fails to be dissolved, then evaporate the clear liquor until the salt be dried. But the Potassio-tartrate of Iron may be dried in the same way as the Ammonio-citrate of Iron.	Prepare the Rust of Iron from the Sulphate as directed under Ferrugo, and without drying it. Mix the pulpy mass with 4 pints of water; add the Bitartrate; boil till the rust of iron is dissolved; let the solution cool; pour off the clear liquid, and add to this the Carbonate of Ammonia so long as it occasions effervescence. Concentrate the liquid over the vapour bath to the consistence of a thick extract, or till the residuum becomes on cooling a firm solid; which must be preserved in well-closed vessels.	From the Sulphate of Iron prepare Hydrated Peroxide of Iron, by the process given under *Ferri Peroxidum Hydratum*, and having, immediately after it is washed, placed it with the Bitartrate of Potash and water in a porcelain capsule, apply heat to the mixture (taking care, however, that the temperature does not rise beyond 150°), and stir it occasionally for six hours. Let the solution, after it has cooled down to the temperature of the atmosphere, be decanted off any undissolved oxide of iron, and, having transferred it in small quantities to delf dinner plates, let it be evaporated to dryness a heat not exceeding 150°. Lastly, chip off the film of dry salt which adheres to the plates, and preserve it in well-stopped bottles.

Incompatible with tinctures, being very insoluble in spirit.

DOSE.—5 to 20 grains in pill, or dissolved in water.

TEST.—Soluble in water. This solution changes neither the colour of Litmus nor Turmeric; neither, on the addition of Ferrocyanide of Potassium, is it turned blue, nor is any thing thrown down by any alkali. Should it be heated with Potash, 100 grains throw down about 34 grains of the Sesquioxide of Iron.—LOND. Entirely soluble in cold water; taste, feebly chalybeate; the solution is not immediately altered by cold Aqua Potassæ, and not precipitated by solution of Ferrocyanide of Potassium.—EDIN.

FERRI PULVIS.

Not in Pharm.	Not in Pharm.	Metallic Iron reduced to a state of minute division by means of hydrogen. For the process, (*Vide* Appendix.)

FERRI SESQUIOXIDUM.

	Ferri Oxidum Rubrum.	*Ferri Peroxidum.*
Sulphate of Iron - - 4 lbs. Carbonate of Soda 4 lbs. & 2oz. Boiling Water - 6 gallons.	Sulphate of Iron - - 4oz. Carbonate of Soda - - 5oz. Boiling Water - - ½ pint. Cold Water - - - 3½ pint.	Hydrated Peroxide of Iron, any convenient quantity.
Dissolve the Sulphate and Carbonate separately in 3 gallons	Dissolve the Sulphate in the boiling water, add the cold	Place it in an oven, on a few folds of filtering paper, and

LONDON.	EDINBURGH.	DUBLIN
	CONTINUED.	AVOIRDUPOIS WEIGHT.
of water; mix the solutions together while yet hot, and set aside, that what is precipitated may subside; the supernatant liquor being then poured off, wash frequently the precipitate and dry it.	water, and then the Carbonate of Soda previously dissolved in about thrice its weight of water; collect the precipitate on a calico filter, wash it with water till the water is but little affected with solution of Nitrate of Baryta, and dry it in the hot air-press or over the vapour-bath.	when it has become dry to the touch, transfer it to a covered crucible, and expose it for a few minutes to an obscure red heat.

The London and Edinburgh processes are similar, and contain a small amount of Carbonate of Iron. The Irish formula *ensures* a Peroxide of Iron.

DOSE.—Half a drachm to 4 drachms.

TEST.—It is soluble in dilute Hydrochloric Acid, scarcely effervescing, and the same is again thrown down by Potash. The strained liquor is free from colour, and Hydrosulphuric Acid or Ferrocyanide of Potassium being added, it is not coloured.

FERRI SULPHAS.

Commercial Sulphate of Iron, 4 lbs. Sulphuric Acid - - 1 fl.oz. Iron Wire - - - - 1oz. Distilled Water - - 4 pints. Mix the acid with the water, and to these add the Sulphate and the Iron; then apply heat, frequently stirring, until the Sulphate be dissolved; strain the solution while yet hot, and put by, that crystals may form; evaporate the liquor poured off, that crystals may again form; dry them all.	If the Sulphate of Iron of Commerce be not in transparent green crystals, without efflorvescence; dissolve it in its own weight of boiling water acidulated with a little Sulphuric Acid; filter, and set the solution aside to crystallize; preserve the crystals in well-closed bottles.	Iron Wire, or turnings of Wrought Iron - - 4oz. Oil of Vitriol of Commerce 4 fl. oz, Distilled Water - - 1½ pint. Pour the water on the iron placed in a porcelain capsule, add the Oil of Vitriol, and, when the disengagement of gas has nearly ceased, boil for 10 minutes; filter now through paper, and, having separated the crystals which, after the lapse of 24 hours, will have been deposited from the solution; let them be dried upon blotting paper placed upon a porous brick, and then preserved in a well-stopped bottle.

INCOMPATIBLES.—The Alkalies and their Carbonates, Nitric Acid, Lime Water, Nitrate and Tartrate of Potash, Iodide of Potassium, Borax, Chloride of Barium, Acetate of Lead, the Soaps, and all vegetable astringents.

DOSE.—1 to 5 grains in pill, or in water previously boiled, or in carbonated water.

TEST.—Pale blueish-green crystals, with little or no efflorescence; soluble in water; insoluble in Alcohol and Proof Spirit, hence it cannot be dissolved in tinctures.

FERRI SULPHAS EXSICCATUM.

		Ferri Sulphas Siccatum.
Not in Pharm.	Expose any convenient quantity of Sulphate of Iron to a moderate heat in a porcelain or earthenware vessel not glazed with lead, till it is converted into a dry greyish white mass, which is to be reduced to powder.	Granulated Sulphate of Iron, any convenient quantity; expose the salt in a porcelain capsule to an oven heat not exceeding 400°, until aqueous vapours cease to be given off, and having then reduced it to a fine powder, preserve it in a well-stopped bottle.

Three grains of this are about equal to 5 grains of the green Sulphate; and pills made with this instead of the green Sulphate will retain their shape better.

FERRI SULPHAS GRANULATUM.

Not in Pharm.	Not in Pharm.	AVOIRDUPOIS WEIGHT. For the process, (*Vide* Appendix.)

FERRI SULPHURETUM.

Not in Pharm.	The best Sulphuret of Iron is made by heating an iron rod to a full white heat in a forge, and rubbing it with a roll of Sulphur over a deep vessel filled with water, to receive the fused globules of Sulphuret which form. An inferior sort, good enough, however, for Pharmaceutic purposes, is obtained by heating one part of sublimed Sulphur and three of Iron filings in a crucible in a common fire till the mixture begins to glow, and then removing the crucible and covering it, until the action, which at first increases considerably, shall come to an end.	Rods of Iron, of the size employed in the manufacture of nails, any convenient number. Having raised them to a strong red or white heat, apply them in succession by their heated extremities to sticks of Sulphur, operating so that the melted Sulphuret as it is formed may drop into a stone cistern filled with water, and be thus protected from oxidation. The water being poured off, let the product be separated from the Sulphur with which it is mixed, and, when dried, let it be enclosed in a well-stopped bottle.

Barely given internally; chiefly used in making Hydrosulphuric Acid by the addition of diluted Sulphuric Acid, which almost entirely dissolves it.

FERRI VALERIANAS.

Not in Pharm.	Not in Pharm.	Valerianate of Soda - 5oz. and ℥iii. Sulphate of Iron - - 4 oz. Distilled Water - - 1 pint. Let the Sulphate of Iron be converted into a Persulphate, as directed in the formula for *Ferri Peroxidum Hydratum*, and by the addition of distilled water, let the solution of the Persulphate be augmented to the bulk of 8oz. Dissolve the Valerianate of Soda in 10oz. of the water; then mix the two solutions cold, and having placed the precipitate which forms upon a filter, and washed it with the remainder of the water, let it be dried by placing it for some days, rolled up in bibulous paper, on a porous brick. This preparation should be kept in a well-stopped bottle.

DOSE.—Half a grain to 1 grain three times a day.

TEST.—A reddish-brown coarse powder. It is insoluble in water; readily soluble in Alcohol; heated, the Valerianic Acid is driven off, and Peroxide of Iron left. Muriatic Acid dissolves it, giving off the strong odour of Valerian.

INCOMPATIBLES.—All acids, and the astringent vegetable extracts.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.

FERRUGO.

Vide Ferri Oxidum Rubrum Hydratum.

FERRUM TARTARIZATUM.

Vide Ferri Potassio-Tartras.

GALBANUM PRÆPARATUM.

Prepare this in the same manner as has been ordered concerning Prepared Ammoniacum.	Not in Pharm.	Not in Pharm.

The introduction of this process is to ensure the uniformity of strained Galbanum.

HEPAR SULPHURIS.

Vide Potassii Sulphuretum.

HYDRARGYRI AMMONIO-CHLORIDUM.

	Hydrargyri Precipitatum Album.	
Bichloride of Mercury - 6oz.	Corrosive Sublimate - 6oz.	Corrosive Sublimate - 1oz.
Distilled Water - - 6 pints.	Distilled Water - - 6 pints.	Distilled Water - - 1 pint.
Solution of Ammonia 8 fl. oz.	Aqua Ammoniæ - - 8 fl.oz.	Solution of Ammonia fl. ℥ix.
Dissolve the Bichloride in the water, aided by heat; to this, when it has cooled, add the Ammonia, frequently shaking it; wash the precipitated powder until it be free from taste; lastly, dry it.	Dissolve the Corrosive Sublimate with the aid of heat in the distilled water; and when the solution is cold, add the Aqua Ammoniæ; stir the whole well; collect the powder on a calico filter, and wash it thoroughly with cold water.	Dissolve the Corrosive Sublimate in the water, with the aid of a gentle heat, pour the Ammonia into the solution, and, having stirred the mixture well, collect the precipitate on a filter, and wash it with warm distilled water, until the liquid which passes through ceases to give a precipitate when dropped into an acid solution of Nitrate of Silver. Lastly, dry the product at a temperature not exceeding 212°.

USE.—Externally. *Vide* Ung. Hydr. Ammonio-chloridi.

TEST.—Pulverulent; white; sublimes by heat; is soluble in Hydrochloric Acid, without effervescence; heated with Liquor Potassæ it exhales Ammonia, and changes to a yellow colour.

HYDRARGYRI BICHLORIDUM.

	Sublimatus Corrosivus.	*Sublimatum Corrosivum.*
Mercury - - - - - 2lb.	Mercury - - - - - 4oz.	Sulphate of Mercury - 10lb.
Sulphuric Acid - 21½ fl. oz.	Sulphuric Acid (Commercial) 2 fl. oz. and fl. ℥iii.	Dried Chloride of Sodium 5lb.
Chloride of Sodium - 1½ lb.	Muriate of Soda - - - 3oz.	
	Pure Nitric Acid - ½ fl. oz.	
Boil down the Mercury with the Acid, until dry Bipersulphate of Mercury remains;	Mix the acids; add the Mercury; dissolve it with the aid of a moderate heat; and	Reduce each salt to a fine powder, and, having mixed them carefully by trituration

LONDON.	**EDINBURGH.** CONTINUED.	**DUBLIN.** AVOIRDUPOIS WEIGHT.
rub this when it has cooled with the Chloride in a porcelain mortar, then, with heat gradually increased, sublime.	then raise the heat so as to obtain a dry salt. Triturate this thoroughly with the Muriate of Soda; and sublime in a proper apparatus.	in a mortar, let the mixture be introduced into an iron pot lined with clay, and by a regulated heat, applied through the intervention of sand, let the Corrosive Sublimate be sublimed into an earthen head placed over the pot, and connected to it by means of lute. The product should be preserved in an opaque bottle.

DOSE.—One-twelfth to one-eighth of a grain made into a pill, with crumb of bread; also in solution, as in Liq. Hydrarg. Bichloridi.

INCOMPATIBLES.—The Alkalies and their Carbonates, Lime and its Carbonate, Tartar Emetic, Nitrate of Silver, Acetate of Lead, Iodide of Potassium, Albumen, Soaps, Almond Mixture, Decoction of Bark, and other astringents.

TEST.—Crystalline; liquefies by heat, and quickly sublimes; it is soluble in water, Rectified Spirit, and Ether. What is precipitated from the watery solution on the addition of Potash, Soda, or Lime Water, is reddish, but if any of these more abundantly are added, it is yellowish. This yellow precipitate, on the application of heat, evolves Oxygen, and runs into globules of Mercury.

HYDRARGYRI BINIODIDUM.

London	Edinburgh	Dublin
Not in Pharm.		*Hydrargyri Iodidum Rubrum.*
	Mercury - - - - - 2oz. Iodine - - - - - 2½oz. Concentrated Solution of Muriate of Soda - 1 gallon.	Corrosive Sublimate - 1oz. Iodide of Potassium - ʒx. Distilled Water, 2 pints, or as much as is sufficient.
	Triturate the Mercury and Iodine together, occasionally adding a little rectified spirit till a uniform red powder be obtained. Reduce the product to fine powder, and dissolve it in the solution of Muriate of Soda with the aid of brisk ebullition. Filter, if necessary, through calico, keeping the funnel hot; wash and dry the crystals which form on cooling.	Dissolve the Corrosive Sublimate with the aid of heat in 25oz. and the Iodide of Potassium in 5oz. of the water, and, when both solutions are cold, mix them. Decant the supernatant liquor when the precipitate has subsided, and having collected this latter upon a paper filter, wash it with the remainder of the water. Finally, dry the product at a temperature not exceeding 212°, and preserve in a close bottle.

DOSE.—From one-sixteenth to one-eighth of a grain; in fact the difference in activity in the Iodides of Mercury is the same as the Chlorides of that metal; and as it was not much prescribed, the London College have deemed it prudent to omit it.

TEST.—Cautiously heated, sublimes in scales, which become yellow, and when cold are red. It is soluble either in Solution of Bichloride of Mercury or Iodide of Potassium. Soluble entirely in 40 parts of a concentrated solution of Muriate of Soda at 212°, and again deposited in fine red crystals on cooling.

HYDRARGYRI BISULPHURETUM.

London	Edinburgh	Dublin
		Cinnabaris.
Not in Pharm.	Mercury - - - - - 2lb. Sulphur - - - - - 5oz.	Mercury - - - - - 2lb. Sulphur - - - - - 5oz.
	Mix the Mercury with the Sulphur over the fire, and as soon as the mass swells remove the vessel, and strongly cover it lest the mixture	Melt the Sulphur, add the Mercury and continue the heat till the mixture begins to swell up. Then remove the vessel and cover it closely

CONTINUED.

take fire; then rub the mass to powder and sublime it.

AVOIRDUPOIS WEIGHT.

to prevent the mixture taking fire. When the material is cold, reduce it to powder, and sublime it.

When employed internally, the dose of Cinnabar has been from 10 to 30 grains; for the purpose of fumigation, half a drachm may be employed.

TEST.—It is sublimed entirely by heat, and without any metallic globules being formed; Potash being added, it runs into globules of Mercury.

HYDRARGYRI CHLORIDUM.

Mercury - - - - -	4 lbs.
Sulphuric Acid - -	21½ fl. oz.
Chloride of Sodium -	1½ lb.

Boil 2 lb. of Mercury with the Acid, until dry Bipersulphate of Mercury remains; rub this, when it has cooled, with 2 lb. of Mercury in a Wedgewood mortar, that they may be very well mixed; then add the Chloride, and triturate them together until the globules are no longer visible; then sublime. Reduce the sublimate into the finest powder, diligently wash it with boiling distilled water, and dry it.

Calomelas.

Mercury - - - - - -	8 oz.
Sulphuric Acid (Commercial),	2 fl. oz. and fl. ʒ iii.
Muriate of Soda - - -	3oz.
Pure Nitric Acid - -	½ fl. oz.

Mix the Acids, add 4oz. of the Mercury, and dissolve it with the aid of a moderate heat; raise the heat so as to obtain a dry salt. Triturate this with the Muriate of Soda and the rest of the Mercury till the globules entirely disappear; heat the mixture by means of a sand bath in a proper subliming apparatus; reduce the sublimate to fine powder; wash the powder with boiling distilled water until the water ceases to precipitate with solution of Iodide of Potassium, and then dry it.

Calomelas.

Mercury of Commerce -	7 lb.
Sulphate of Mercury -	10 lb.
Dried Chloride of Sodium	5 lb.

Incorporate as completely as possible the sulphate and metallic Mercury by prolonged trituration, and having added the Chloride of Sodium, previously reduced to a fine powder, rub all well together until a perfectly equable mixture is obtained. Heat this, through the medium of sand, in a shallow iron pot with a flat bottom, lined with clay, and covered with a lid of cast iron, until the sublimate which attaches itself to a circular plug in the centre of the lid (which admits of being removed and cleaned from time to time), neither exhibits minute globules of Mercury, nor is rendered yellow by being touched with a solution of Caustic Potash. The whole being now permitted to cool down to the temperature of the air, the contents of the pot are to be transferred to a small hot-hearth or oven, whose door is made tight by a clay lute, and a regulated heat is to be applied so as to cause the vaporized Calomel to pass into an adjacent chamber of considerable size, on the floor of which it will accumulate in the form of a fine white powder.

DOSE.—From half a grain to 5 or 6 grains, usually combined with Rhubarb, Jalap, or Scammony, or followed by an aperient.

INCOMPATIBLES.—Alkalies and their Carbonates, Chloride of Sodium, Nitric and Muriatic Acids, Iodide of Potassium.

TEST.—It is pulverulent; whitish; sublimes by heat, leaving no residuum. Sulphuric Ether agitated with it, filtered, and then evaporated to dryness, leaves no crystalline residuum, and what residuum may be left is not turned yellow with Aqua Potassæ; shews the absence of Corrosive Sublimate. Becomes black on the addition of Potash; then heat being applied, it runs into globules of Mercury. Neither Nitrate of Silver, nor Lime Water, nor Hydrosulphuric Acid, being added to the water in which it has been washed or boiled, throws down anything. Absence of all soluble Metallic Salts and Chlorine.

HYDRARGYRI IODIDUM.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT. *Hydrargyri Iodidum Viride.*
Mercury - - - - - 1oz. Iodine - - - - - - ʒv.	Not in Pharm.	Pure Mercury - - - 1oz. Pure Iodine - - - - ʒv.
Rectified spirit a sufficient quantity. Triturate together the Mercury and Iodine, adding the spirit by little and little until globules are no longer visible. Dry the powder with a gentle heat as quickly as possible, access of light being prevented, and keep it in a black glass vessel well stopped.		Rectified spirit, a sufficient quantity, rub the Mercury and Iodine in a porcelain mortar, occasionally adding a few drops of the spirit until metallic globules are no longer visible, and the whole assumes a yellowish green colour. Dry the residue at a temperature not exceeding 100°, in a dark room, and preserve it in a bottle impervious to light.

DOSE.—From 1 grain gradually increased to 3 or 4 grains in the form of pill. Externally, *vide* Unguentum.

TEST.—Freshly prepared, it is yellowish. Heat being cautiously applied, it sublimes in red crystals, which quickly turn yellow, and blacken on access of light. It is not soluble in water, Alcohol, or in a solution of Chloride of Sodium, but is soluble in Ether, and slightly so in aqueous solution of Iodide of Potassium.

HYDRARGYRI NITRICO-OXIDUM.

	Hydrargyri Oxidum Rubrum.	*Hydrargyri Oxidum Rubrum.*
Mercury - - - - - 3lb. Nitric Acid - - - 18 fl. oz. Distilled Water - - 2 pints.	Mercury - - - - - 8oz. Diluted Nitric Acid - 5 fl. oz. (Sp. Gr. 1·280)	Pure Mercury - - - 8oz. Pure Nitric Acid - 3 fl. oz. Distilled Water - - - 6oz.
Mix and apply a gentle heat until the Mercury is dissolved. Boil down the liquor and rub what remains to powder. Put this into another very shallow vessel, then apply a slow fire, and gradually increase it until red fumes are no longer given off.	Dissolve half of the Mercury in the Acid, with the aid of a moderate heat; and continue the heat till a dry salt is formed. Triturate the rest of the Mercury with the salt till a fine uniform powder be obtained: heat the powder in a porcelain vessel and constantly stir it, till acid fumes cease to be discharged.	In the acid diluted with the water, digest the Mercury, using at first a very gentle heat, but, when the action has ceased, finally boiling for a few minutes; and, having decanted the solution, evaporate to dryness. Let the residuum, first reduced to powder, be transferred to a shallow cast iron pot with a flat bottom, and loosely covered by a fire-tile lid; and in this let it be exposed to the heat of a slow fire until red vapours cease to be given off. The heat must now be withdrawn, and when the pot has cooled, its contents should be transferred to bottles.

It is rarely given internally; employed in the preparations of Ointments. *Vide* Unguent.

TEST.—It consists of Crystalline, shining, red scales; it is soluble in Hydrochloric and Nitric Acids.—LOND. An intense heat decomposes and sublimes it entirely, in metallic globules, without any discharge of Nitrous fumes.—EDIN.

HYDRARGYRI PRÆCIPITATUM ALBUM.

Vide Hydrargyri Ammonio-Chloridi.

LONDON.	EDINBURGH.	DUBLIN.

HYDRARGYRI SULPHAS.

Not in Pharm.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Quicksilver of Commerce 10oz. Oil of Vitriol of Commerce 6 fl. oz.
		Place the Quicksilver and Oil of Vitriol in a porcelain capsule, and apply heat until effervescence ceases, and nothing remains but a white and dry crystalline salt.

This is used in the preparation of Calomel and Corrosive Sublimate.

HYDRARGYRUM CUM CRETA.

Mercury - - - - - 3oz.	Mercury - - - - - 3oz.	Pure Mercury - - - 1oz.
Prepared Chalk - - - 5oz.	Prepared Chalk - - - 5oz.	Prepared Chalk - - - 2oz.
Triturate together until the globules are no longer visible.	Triturate them together till the globules entirely disappear.	Rub the Mercury and Chalk in a porcelain mortar, until the metallic globules cease to be visible, and the mixture acquires a uniform grey colour.

DOSE.—From 5 to 20 grains; best given in powder, as when rubbed with hard Extract to form a pill, the Mercury sometimes separates in globules.

INCOMPATIBLES.—Acids and Acid Salts, Alum and other Sulphates.

TEST.—By heat, part passes off in vapour; what remains, corresponds with prepared Chalk in its chemical characters.

HYDRARGYRUM CUM MAGNESIA.

Not in Pharm.	Not in Pharm.	Pure Mercury - - - 1oz. Carbonate of Magnesia - 2oz.
		The method of preparation is the same as for *Hydrargyrum cum Cretâ.*

DOSE.—Same as Hydrar. cum Creta, and by some preferred to it.

HYDRARGYRUM PURUM.

		Quicksilver of Commerce 3 lb. Pure Muriatic Acid - ½ fl. oz. Distilled Water - - - 2oz.
In the Mat. Med. Strained Mercury.	In the Mat. Med. Mercury.	Having introduced the Quicksilver into a small glass retort, over the body of which a hood of sheet iron is supported, let the heat of a gas lamp be applied until two-thirds of the metal has distilled over. Boil this for a few minutes with the acid and water, and having, by repeated affusion of distilled water, and decantation, re-

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT. moved the entire of the acid, let the metal be poured into a capsule, and dried by the application of heat.

This process is placed in the body of the Work, because the Mercury now imported is not so pure as it was some years ago, as attested by philosophical instrument makers.

TEST.—Sp. Gr. 13·5. Entirely sublimed by heat; a globule moved on paper leaves no trail.

INFUSA.—Infusions, as usually prepared, have the ingredients placed at the bottom of the vessel in the saturated water. A better way is to *suspend* the materials to be acted upon; the saturated fluid then finds its way to the bottom, and the material is constantly surrounded by a fresh portion of the water.*

INFUSUM ANTHEMIDIS.

London	Edinburgh	Dublin
Chamomile Flowers - ʒv. Boiling Distilled Water 1 pint.	Chamomile - - - - ʒv. Boiling Water - - 1 pint.	Chamomile Flowers dried ½oz. Boiling Water - - - 12oz.
Macerate for 10 minutes in a closed vessel and strain.	Infuse for 20 minutes in a covered vessel and then strain.	Infuse for 15 minutes in a covered vessel and strain. The product should measure about 8oz.

London and Edinburgh the same; Dublin, stronger.

INFUSUM ARMORACIÆ COMPOSITUM.

London	Edinburgh	Dublin
Horse-radish Root sliced. Mustard Seed bruised, of each 1oz. Compound Spirit of Horse-radish 1 fl. oz. Boiling Distilled Water 1 pint.	Not in Pharm.	Not in Pharm.
Macerate the Horse-radish and Mustard Seed in the water for 2 hours in a covered vessel, and strain; then add the spirit.		

The dispenser is *now* left in doubt as to whether black or white Mustard Seed is meant, since both represent Sinapis in the Materia Medica.

DOSE.—1 to 2 ounces, as a warm stimulant.

INCOMPATIBLES.—Solutions of Salts of Silver and Mercury, Alkalies and their Carbonates.

INFUSUM AURANTII COMPOSITUM.

London	Edinburgh	Dublin
	Infusum Aurantii.	
Dried Orange Peel - - ½oz. Lemon Peel (fresh or dried) ʒii.	Bitter Orange Peel, dried ½oz. Lemon Peel, fresh - - ʒii.	Bitter Orange Peel, dried ʒiii.
Bruised Cloves - - - ʒi. Boiling Distilled Water 1 pint.	Cloves, bruised - - - ʒi. Boiling Water - - 1 pint.	Cloves, bruised - - - ʒss. Boiling Water - - ½ pint.
Macerate for 15 minutes in a closed vessel, and strain.	Infuse for 15 minutes in a covered vessel, and strain through linen or calico.	Infuse for half an hour in a covered vessel, and strain. The product should measure about 8oz.

The Dublin differs from the other two, in strength and ingredients.

DOSE.—1 to 2 ounces.

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* The Author has used a porcelain contrivance of this kind for many years, which answers perfectly.

INFUSUM BUCHU.

LONDON.	EDINBURGH.	DUBLIN.
Buchu Leaves - - - 1oz. Boiling Distilled Water 1 pint.	Bucku - - - - - - 1oz. Boiling Water - - - 1 pint.	AVOIRDUPOIS WEIGHT. Buchu Leaves, bruised - ½oz. Boiling Water - - ½ pint.
Macerate for 4 hours in a covered vessel, and strain.	Infuse for 2 hours in a covered vessel, and strain through linen or calico.	Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

A stimulating diuretic and tonic. It communicates its odour to the urine.

DOSE.—From 1 to 2 ounces.

INCOMPATIBLES.—The Sesqui-Salts of Iron.

INFUSUM CALUMBÆ.

Calumba, sliced - - - ʒv.	Calumba, in coarse powder ½oz.	Calumba Root in coarse powder ʒiii.
Boiling Distilled Water 1 pint.	*Cold* Water, about - 1 pint.	*Cold* Water - - - - 9oz.
Macerate for 2 hours in a closed vessel, and strain.	Triturate the Calumba with a little of the water, so as to moisten it thoroughly; put it into a percolator, and transmit cold water till 16 fl. oz. of infusion be obtained.	Macerate for 2 hours, and strain. The product should measure about 8oz.

The relative strengths are thus: Dublin 6, London 5, and Edinburgh 4.

The London orders boiling water, the other Colleges direct cold; in the latter case the starch is not dissolved. The Salts of Iron may be ordered with this infusion, as with Infusion of Quassia, it being free from astringent matter.

INCOMPATIBLES.—Solutions of Lead and Mercury, and Lime Water.

INFUSUM CARYOPHYLLI.

Cloves, bruised - - - ʒiii. Boiling Distilled Water 1 pint.	Bruised Cloves - - - ʒiii. Boiling Water - - 1 pint.	Cloves, bruised - - - ʒii. Boiling Water - - - 9oz.
Macerate for 2 hours in a closed vessel, and strain.	Infuse for 2 hours in a covered vessel, and strain through linen or calico.	Infuse for 1 hour in a covered vessel, and strain. The product should measure about 8oz.

Dublin stronger than London and Edinburgh.

DOSE.—1 to 2 ounces.

INCOMPATIBLES.—Lime Water, Metallic Salts, Sulphuric Acid.

INFUSUM CASCARILLÆ.

Bruised Cascarilla - - 1½oz.	Cascarilla, bruised - 1½oz. Boiling Water - - 1 pint.	Cascarilla Bark, in fine powder. 1 oz.
Boiling Distilled Water 1 pint.		Boiling Water - - ½ pint.
Macerate for 2 hours in a covered vessel, and strain.	Infuse for 2 hours in a covered vessel, and strain through linen or calico.	Infuse for 1 hour in a covered vessel, and strain. The product should measure about 8oz.

REMARK.—Dublin stronger than London and Edinburgh.

DOSE.—1 to 2 ounces.

INCOMPATIBLES.—Same as Caryophillum.

This infusion quickly changes, and will scarcely keep good for a day in Summer.

INFUSUM CATECHU COMPOSITUM.

LONDON.	EDINBURGH.	DUBLIN.
	Infusum Catechu.	AVOIRDUPOIS WEIGHT.
Powdered Catechu - - ʒvi.	Catechu, in powder - ʒvi.	Catechu, in coarse powder, ʒiii.
Bruised Cinnamon - - ʒi.	Cinnamon, in powder - ʒi.	Cinnamon Bark, bruised ʒss.
Boiling Distilled Water 1 pint.	Syrup - - - - - - 3 fl. oz. Boiling Water - - 17 fl. oz.	Boiling Water - - - 9oz.
Macerate for 1 hour in a closed vessel, and strain.	Infuse for 2 hours the Catechu and Cinnamon with the water; strain through linen or calico, and add the Syrup.	Infuse for ½ hour in a covered vessel, and strain. The product should measure about 8oz.

REMARK.—Strength the same in all, but the Edinburgh has the addition of Syrup. All differ in time of infusing.

DOSE.—1 to 3 ounces.

INCOMPATIBLES.—Alkalies, Alcaloids, Lime Water, Metallic Salts, and Gelatine.

INFUSUM CHIRETTÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Chiretta - - - - - ʒiv.	Chiretta, bruised - - - ʒii.
	Boiling Water - - 1 pint.	Boiling Water - - - 9½oz.
	Infuse for 2 hours and strain through linen or calico.	Infuse for 1 hour in a covered vessel, and strain. The product should measure about 8oz.

The Edinburgh and Dublin are alike in strength. The infusion generally used in London is only three-fourths of the strength, and made with cold water. Salts of Iron may be given in this Infusion when a strong bitter is desired as a vehicle.

" also salts of [illegible] **DOSE.**—1 to 2 ounces. and alkalies. excellent bitter tonic

INFUSUM CINCHONÆ.

LONDON.	EDINBURGH.	DUBLIN.
Bruised Yellow Bark - 1oz.	Any species of Cinchona, according to prescription, in powder - - - - - 1oz.	Not in Pharm.
Boiling Distilled Water 1 pint.	Boiling Water - - 1 pint.	
Macerate for 2 hours in a covered vessel, and strain.	Infuse for 4 hours in a covered vessel, and then strain through linen or calico.	

The Edinburgh directions are to be preferred; since, when "Infusum Cinchonæ" was ordered, in the last Pharmacopœia, *pale* or lance-leaved bark was directed; and now under the same name, *yellow* bark is ordered.

DOSE.—1 to 3 ounces.

INCOMPATIBLES.—Ammonia, Lime Water, Metallic Salts, Gelatine.

INFUSUM CINCHONÆ SPISSATUM.

LONDON.	EDINBURGH.	DUBLIN.
Coarsely bruised Yellow Cinchona 3lb.	Not in Pharm.	Not in Pharm.
Distilled Water - - 6 pints.		
Rectified Spirits as much as may be necessary.		
Macerate the Cinchona in the same manner as we directed Extract of Cinchona to be prepared, and strain. Evaporate the mixed infusions in a water bath to the fourth		

CONTINUED.

AVOIRDUPOIS WEIGHT.

part, and place aside that the dregs may settle. Pour off the clear liquor, and strain what remains. Then mix them, and again evaporate, until the Sp. Gr. of the liquor be 1·200. To this, when it is cooled, drop in the spirit by degrees, so that 3 fluid drachms may be added to each fluid ounce of the liquor. Lastly, set aside the liquor for 20 days, that the dregs may entirely subside.

These concentrated infusions are probably intended to take the place of the so called "liquors" now in use.

INFUSUM CINCHONÆ PALLIDÆ.

LONDON.	EDINBURGH.	DUBLIN.
This is the Infusum Cinchona of the Ph. 1836.	For the Edin. Formula, *Vide* Infusum Cinchona.	*Infusum Cinchona.*
		Peruvian Bark (crown or pale) in coarse powder 1oz. Boiling Water - - ½ pint.
Prepare this in the same manner in which we ordered Infusion of Cinchona to be prepared.		Infuse for 1 hour in a covered vessel, and filter through paper. The product should measure about 8oz.

DOSE.—1 to 3 ounces. This oppresses the stomach less than any of the Cinchona Barks.

INFUSUM CINCHONÆ PALLIDÆ SPISSATUM.

LONDON.	EDINBURGH.	DUBLIN.
Prepare this in the same manner in which we ordered the Concentrated Infusion of Cinchona Bark to be prepared.	Not in Pharm.	Not in Pharm.

Now introduced, doubtless, to stand in the place of Liq. Cinchonæ Pallidæ.

INFUSUM CUSPARIÆ.

LONDON.	EDINBURGH.	DUBLIN.
	(*Infusum Angusturæ*).	
Cusparia Bark, bruised - ℥v. Boiling Distilled Water 1 pint.	Cusparia, bruised - - ℥v. Boiling Water - - 1 pint.	Not in Pharm.
Macerate for 2 hours in a closed vessel, and strain.	Infuse for 2 hours in a covered vessel, and then strain through linen or calico.	

DOSE.—1 to 2 ounces, as a tonic. in [illegible] Intermittents

INCOMPATIBLES.—Sesqui-Salts of Iron, Nitrate of Silver, and Acetate of Lead.

INFUSUM DIGITALIS.

LONDON.	**EDINBURGH.**	**DUBLIN**
Dried Digitalis - - - ʒi. Spirit of Cinnamon - 1 fl. oz. Boiling Distilled Water 1 pint.	Digitalis, dried - - - ʒii. Spirit of Cinnamon - 2 fl. oz. Boiling Water - - 18 fl. oz.	AVOIRDUPOIS WEIGHT. Foxglove Leaves, dried - ʒi. Boiling Water - - - 9oz.
Macerate for 4 hours the Digitalis in the water in a closed vessel, and strain, then add the spirit.	Infuse for 4 hours in a covered vessel the Digitalis in the water; strain through linen or calico; and then add the Spirit of Cinnamon.	Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

London only half the strength of Edinburgh and Dublin.

DOSE.—Half an ounce to 1 ounce, London; 2 drachms to half an ounce, Edinburgh and Dublin, as a diuretic. A strong infusion is applied externally with advantage in Anasarca.

INCOMPATIBLES.—Salts of Iron, preparations of Cinchona Bark, and the Acetates of Lead.

INFUSUM ERGOTÆ.

Not in Pharm.	Not in Pharm.	Ergot of Rye, in coarse powder ʒii. Boiling Water - - - 9oz.
		Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

It should be made *fresh* on each occasion.

INFUSUM GENTIANÆ COMPOSITUM.

	Infusum Gentiana.	
Gentian Root, sliced, Dried Orange Peel, of each ʒii. Lemon Peel (fresh or dried) ʒiv. Boiling Distilled Water 1 pint.	Gentian, sliced - - - ½oz. Bitter Orange Peel, dried and bruised - - - - - ʒi. Coriander, bruised - - ʒi. Proof Spirit - - - 4 fl. oz. Cold Water - - - 16 fl. oz.	Gentian Root, bruised. Orange Peel, dried, of each ʒii. Boiling Water - - - ½ pint.
Macerate for 1 hour, in a closed vessel, and strain.	Pour the Spirit upon the solids; in 3 hours add the water; and in 12 hours more strain through linen or calico.	Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

London is half the strength of Edinburgh and Dublin. Ingredients of Edinburgh differ widely from the rest, and the spirit it contains is objectionable in prescription, although it prevents change by keeping.

DOSE.—1 to 2 ounces, a good vehicle for the Alkaline Bicarbonates.

INCOMPATIBLES.—Salts of Lead and Iron; the Ammonio-citrate excepted.

INFUSUM JUNIPERI.

Not in Pharm.	Not in Pharm.	Juniper Berries, bruised - 1oz. Boiling Water - - ½ pint.
		Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

DOSE—2 to 3 ounces, as a diuretic.

INFUSUM KRAMERIÆ.

LONDON.	EDINBURGH.	DUBLIN.
Rhatany Root, bruised - 1oz. Boiling Distilled Water 1 pint. Macerate for 4 hours, in a closed vessel, and strain.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Rhatany Root, bruised - ½oz. Boiling Water - - - 9oz. Digest for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

DOSE.—1 to 2 ounces, astringent and tonic.

INCOMPATIBLES.—Metallic Salts, Gelatine, Alcaloids, and Lime Water.

INFUSUM LINI COMPOSITUM.

Linseed - - - - - ʒ vi. Fresh Liquorice, sliced - ʒ ii. Boiling Distilled Water 1 pint. Macerate for 4 hours near to the fire in a closed vessel, and strain.	*Infusum Lini.* Linseed - - - - - ʒ vi. Liquorice Root, bruised ʒ ii. Boiling Water - - 1 pint. Digest for 4 hours near the fire in a covered vessel, and then strain through linen or calico. **DOSE.**—Ad libitum, as a demulcent. INCOMPATIBLES.—Metallic Salts.	Not in Pharm.

INFUSUM LUPULI.

Hops - - - - - - ʒ vi. Boiling Distilled Water 1 pint. Macerate for 4 hours, in a closed vessel, and strain.	Not in Pharm.	Not in Pharm.

DOSE.—1 to 2 ounces, bitter tonic, and stomachic.

INCOMPATIBLES.—Mineral Acids and Metallic Salts.

INFUSUM MATICO.

Not in Pharm.	Not in Pharm.	Matico Leaves, cut small ½oz. Boiling Water - - ½ pint. Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

DOSE.—1 to 2 ounces.

INFUSUM MENTHÆ VIRIDIS.

Not in Pharm.	Not in Pharm.	Spearmint, dried, and cut small ʒ iii. Boiling Water - - ½ pint. Infuse for 15 minutes, in a covered vessel, and strain. The product should measure about 8oz.

Infusion of Mint often succeeds in allaying sickness when other remedies fail.

INFUSUM PAREIRÆ.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Pareira - - - - - ʒ vi.	Pareira Root, bruised, and torn into shreds - - ½oz.
	Boiling Water - - 1 pint.	Boiling Water - - - 9oz.
	Infuse for 2 hours, in a covered vessel, and then strain through linen or calico.	Digest for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

The London College has discontinued this preparation, and substituted for it, the Decoction.

DOSE.—1 to 2 ounces.

INCOMPATIBLES.—Metallic Salts, and Iodine in solution.

INFUSUM POLYGALÆ.

Vide Infusum Senegæ.

INFUSUM QUASSIÆ.

Quassia, sliced - - - ℈ii.	Quassia in chips - - - ʒ i.	Quassia Wood, rasped - ʒ i.
Boiling Distilled Water 1 pint.	Boiling Water - - 1 pint.	Boiling Water - - - 8½oz.
Macerate for 2 hours, in a closed vessel, and strain.	Infuse for 2 hours, in a covered vessel, and then strain through linen or calico.	Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

Dublin is twice the strength of the other two.

DOSE.—1 to 2 ounces; a good vehicle for any medicine when a bitter adjunct is required.

INCOMPATIBLES.—Nitrate of Silver and Acetate of Lead.

INFUSUM RHEI.

Rhubarb, sliced - - ʒ iii.	Rhubarb bruised into coarse powder - - - - - 1oz.	Rhubarb Root in thin slices ʒ ii.
Boiling Distilled Water 1 pint.	Spirit of Cinnamon - 2 fl. oz. Boiling Water - - 18 fl. oz.	Boiling Water - - - 9oz.
Macerate for 2 hours, in a closed vessel, and strain.	Infuse the Rhubarb for 12 hours in the water, in a covered vessel; add the Spirit, and strain through linen or calico.	Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

All differ in strength and time for infusing. The Edinburgh is a *compound*, and more than twice the strength of the other two.

DOSE.—1 to 3 ounces.

INCOMPATIBLES.—Salts of Iron, Tartar Emetic, Bichloride of Mercury. Alkalies darken its colour, but do not materially affect its properties. Lime Water is objectionable.

INFUSUM ROSÆ COMPOSITUM.

	Infusum Rosæ.	*Infusum Rosæ Acidum.*
Dried Red Rose - - ʒ iii.	Rosa Gallica, dried - ʒ iii.	Petals of the Gallic Rose, dried ʒ ii.
Dilute Sulphuric Acid fl. ʒ iss.	Diluted Sulphuric Acid fl. ʒ iss.	Dilute Sulphuric Acid - fl. ʒ i.
Sugar - - - - - - ʒ vi.	Pure Sugar - - - - ʒ vi.	
Boiling Distilled Water 1 pint.	Boiling Distilled Water 1 pint.	Boiling Water - - ½ pint.
First separate the Rose petals, then pour on them the	Infuse the Rose-petals in the water, in a covered vessel of	Infuse the Petals for 1 hour in the water, in a covered vessel,

LONDON.	**EDINBURGH.**	**DUBLIN.**
	CONTINUED.	AVOIRDUPOIS WEIGHT.
water, and add the Acid. Macerate for 2 hours, and strain off the liquor; lastly, add the sugar.	glass or porcelain, not glazed with lead, for 1 hour; then add the Acid, strain through linen or calico, and dissolve the Sugar in the liquor.	strain, and add the Acid. The product should measure about 8oz.

The Dublin is stronger than London and Edinburgh. The time for London is reduced from 6 to 2 hours, which is desirable in dispensing. The Rose Petals hold their astringency with great tenacity, and if a cold infusion by percolation had been introduced of treble or quadruple strength, it would have been a more elegant, bright, and convenient form for dispensing; one with Nitric Acid might have been also prepared for Quinine mixtures. It is one of the best vehicles for the administration of the Neutral Purgative Salts.

INCOMPATIBLES.—Alkalies, Alkaline Earths, and their Carbonates, Salts of Lead, Silver, and Iron, Tartar Emetic, and preparations of Cinchona Bark. Borate and Phosphate of Soda change the colour of Infusion of Roses to a greenish-brown.

INFUSUM SENEGÆ.

Not in Pharm.		*Infusum Polygalæ.*
	Senega - - - - - - - ʒx.	Polygala Root, bruised - ½oz.
	Boiling Water - - 1 pint.	Boiling Water - - - 9oz.
	Infuse for 4 hours, in a covered vessel, and strain.	Digest for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

It is thought by some, that the infusion is preferable to a decoction, as long boiling produces an insoluble compound with the active principle. The decoction is retained by the London College.

DOSE.—2 to 3 ounces. in British Pharmacopoeia

INFUSUM SENNÆ COMPOSITUM.

	Infusum Sennæ.	
Senna Leaves - - - ʒxv.	Senna - - - - - - - 1½oz.	Senna Leaves - - - ½oz.
Bruised Ginger - - - ℈iv.	Ginger, bruised - - ℈iv.	Ginger Root, sliced - ʒss.
Boiling Distilled Water 1 pint.	Boiling Water - - 1 pint.	Boiling Water - - ½ pint.
Macerate for 1 hour, in a closed vessel, and strain.	Infuse for 1 hour, in a covered vessel, and then strain through linen or calico.	Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

As in warm weather this Infusion quickly spoils by keeping, the addition of 1 grain of Nitre to each fluid ounce of the Infusion will be found to impart great conservative power.

DOSE.—From 2 to 4 ounces.

It will be seen that the Edinburgh has two forms. Their Infus. Sennæ corresponds to the London and Dublin "Compositum."

INFUSUM SENNÆ COMPOSITUM.

Not in Pharm.	Senna - - - - - - - ʒi.	Not in Pharm.
	Tamarinds - - - - 1oz.	
	Coriander, bruised - - ʒi.	
	Muscovado (Brown Sugar) ½oz.	
	Boiling Water - - 8 fl. oz.	
	Infuse for 4 hours, with occasional stirring, in a covered vessel, not glazed with lead, and then strain through linen or calico. This infusion may be likewise made with twice or thrice the prescribed quantity of Senna.	

INFUSUM SERPENTARIÆ.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Serpentary (Root) - - ½oz. Boiling Distilled Water 1 pint.	Serpentaria - - - - ½oz. Boiling Water - - 1 pint.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Macerate for 4 hours, in a closed vessel, and strain.	Infuse for 4 hours, in a covered vessel, and then strain through linen or calico.	

DOSE.—1 to 2 ounces, as a diaphoretic and tonic. in [illegible] Fevers

INFUSUM SIMARUBÆ.

Not in Pharm.	Simaruba, bruised - - ʒ iii.	Simaruba Root Bark, bruised, ʒ ii.
	Boiling Water - - 1 pint.	Boiling Water - - - 9oz.
	Infuse for 2 hours, in a covered vessel, and then strain through linen or calico.	Infuse for 1 hour, in a covered vessel, and strain. The product should measure about 8oz.

DOSE.—1 to 2 ounces. Tonic, very useful in Diarrhœa and Dysentery. The London College has discontinued ordering it.

INFUSUM VALERIANÆ.

Valerian Root - - - ½oz. Boiling Distilled Water 1 pint.	Not in Pharm.	Valerian Root, bruised - ʒ ii. Boiling Water - - - 9oz.
Macerate for ½ hour in a closed vessel, and strain.		Digest for 1 hour in a covered vessel, and strain. The product should measure about 8oz.

DOSE.—1 to 2 ounces. Antispasmodic.

IODATUM SULPHURIS.

Vide Sulphuris Iodidum.

IODINIUM.

In the Mat. Med. Crystallized.	Iodine as obtained in commerce, being almost always adulterated with variable proportions of water, and being consequently unfit for making pharmaceutic preparations of fixed and uniform strength, it must be dried by being placed in a shallow basin of earthenware in a small confined space of air, with ten or twelve times its weight of fresh-burnt	*Iodinium Purum.* Iodine of Commerce, any convenient quantity. Introduce it into a deep porcelain capsule of a circular shape, and having covered this as accurately as possible with a glass mattrass filled with cold water, apply to the capsule a water heat for the space of 20 minutes, and then, withdrawing the heat, permit the capsule to cool.

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	
		AVOIRDUPOIS WEIGHT.
	lime, till it scarcely adheres to the inside of a dry bottle.	Should the sublimate attached to the bottom of the mattrass include acicular prisms of a white colour and pungent odour let it be scraped off with a glass rod, and rejected. The mattrass being now returned to its previous position, a gentle and steady heat (that of a gas lamp answers well) is to be applied, so as to sublime the entire of the iodine. Upon now lifting off the mattrass, the purified product will be found attached to its bottom. When separated, it should be immediately enclosed in a bottle furnished with an accurately ground stopper.

A most valuable remedial agent in the treatment of glandular enlargements, and scrofulous affections; but generally given in a combined state.

REMARKS.—The acicular crystals mentioned in the Dublin process, is Cyanide of Iodine.

TEST.—Is black, has a metallic lustre, has an odour similar to Chlorine. When heated it liquefies, and then entirely sublimes in violet coloured vapours, if free from earthly impurities. Perfectly soluble in rectified spirit, 1 fluid ounce of rectified spirit will dissolve 40 grains of Iodine. 39 grains with 9 grains of quick lime and 3 ounces of water, when heated short of ebullition, slowly form a perfect solution which is yellowish or brownish if the Iodine be pure, but colourless if there be above 2 per cent. of water or other impurity. The presence of water is readily shown by pressing Iodine between folds of blotting paper.

LINIMENTUM ÆRUGINIS.

Powdered Verdigris - 1oz. Vinegar (common) - 7 fl. oz. Honey - - - - - - 14oz.	Not in Pharm.	Not in Pharm.
Dissolve the Verdigris in the Vinegar, and strain through a linen cloth; then, the Honey being added, boil down to a proper consistence.		

USE.—An Escharotic.

LINIMENTUM AMMONIÆ.

Solution of Ammonia - 1 fl. oz. (Sp. Gr. ·960.)	Aqua Ammonia - - 1 fl. oz. (Sp. Gr. ·960.)	Solution of Ammonia - 1 fl. oz. (Sp. Gr. ·950.)
Olive Oil - - - - 2 fl. oz.	Olive Oil - - - - 2 fl. oz.	Olive Oil - - - - 3 fl. oz.
Shake them together until they are mixed.	Mix and agitate them well together.	Mix them with agitation.

The Dublin is the weaker liniment.

USE.—As a stimulating embrocation.

LINIMENTUM AMMONIÆ COMPOSITUM.

Not in Pharm.	Stronger Aqua Ammoniæ 5 fl. oz. (Sp. Gr. ·880.) Tincture of Camphor - 2 fl. oz. Spirit of Rosemary - 1 fl. oz. Mix them well together. This liniment may be also made weaker for some purposes with 3 fluid ounces of Tincture of Camphor, and 2 of Spirit of Rosemary.	AVOIRDUPOIS WEIGHT. Not in Pharm.

This liniment has been prescribed in London under the name of Antidynous Lotion.

LINIMENTUM AMMONIÆ SESQUICARBONATIS.

Solution of Sesquicarbonate of Amonia - - - - 1 fl. oz. Olive Oil - - - - 3 fl. oz. Shake them together until they are mixed.	Not in Pharm.	Not in Pharm.

LINIMENTUM CALCIS.

Lime Water, Olive Oil - of each 10 fl. oz. Shake them together until they are mixed.	Lime Water, Linseed Oil, of each equal measures. Mix and agitate them well together.	Lime Water, Olive Oil, - of each 2 fl. oz. Mix and agitate them well together.

The London College has now introduced the same form as the Dublin. The Edinburgh is the same as that called "Carron Oil."

LINIMENTUM CAMPHORÆ.

Camphor - - - - - 1oz. Olive Oil - - - - 4 fl. oz. Dissolve.	Camphor - - - - - 1oz. Olive Oil - - - - 4 fl. oz. Rub them together in a mortar till the Camphor is dissolved.	Camphor, in thin slices - 1oz. Olive Oil - - - - 4 fl. oz. Dissolve the Camphor in the Oil with a gentle heat.

USE.—Stimulating Embrocation.

LINIMENTUM CAMPHORÆ COMPOSITUM.

Camphor - - - - - 2½oz. Oil of Lavender - - fl. ʒ i. Rectified Spirit - - 17 fl oz. Stronger Solution of Ammonia 3 fl. oz. (Sp. Gr. ·882.) Dissolve the Camphor and Oil in the Spirit, then add the Ammonia, and shake them well together until they are mixed.	Not in Pharm.	Camphor - - - - - 5oz. Oil of Lavender - - fl. ʒ ii. Rectified Spirit - - 1½ pint. Stronger Solution of Ammonia ½ pint. (Sp. Gr. ·900.) Dissolve the Camphor and Oil of Lavender in the Spirit, then add the Solution of Ammonia, and mix with agitation.

In the former Pharmacopœia, distillation was ordered, but that being found of no advantage, it has now been dispensed with.

LINIMENTUM CANTHARIDIS.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Not in Pharm.	Spanish Flies, in fine powder 3oz. Olive Oil - - - 12 fl. oz.
		Digest the Flies in the Oil for 3 hours in a steam or water bath, and strain through flannel; express the residuum and strain the Oil thus obtained; finally mix both products.

This is not a favorite Liniment with the profession.

LINIMENTUM CROTONIS.

Not in Pharm.	Not in Pharm.	Croton Oil - - - - 1 fl. oz. Oil of Turpentine - 7 fl. oz.
		Mix them with agitation.

When Croton Oil is applied externally it is generally mixed with Olive Oil.

LINIMENTUM HYDRARGYRI.

		Linimentum Hyrargyri Compositum.
Ointment of Mercury, Lard - - - - of each 4oz.	Not in Pharm.	Ointment of Mercury - 1oz.
Camphor - - - - - 1oz. Rectified Spirit - - fl. ʒ i. Solution of Ammonia - 4 fl. oz. (Sp. Gr. ·960.)		Camphor Liniment, Solution of Ammonia, of each 1 fl. oz. (Sp. Gr. ·950.)
Rub first the Camphor with the Spirit, then with the Lard and Ointment. Lastly, the Ammonia being gradually added, mix them all.		Melt the Ointment in the Liniment with a gentle heat, then add the Ammonia, and mix them with agitation.

USE.—A stimulating Liniment applied to indolent tumours.

LINIMENTUM OPII.

Tincture of Opium - 2 fl. oz. Liniment of Soap - 6 fl. oz.	Opium - - - - - 1½oz. Castile Soap - - - - 6oz. Camphor - - - - - 3oz. Oil of Rosemary - fl. ʒ vi. Rectified Spirit - - 2 pints.	Tincture of Opium, Soap Liniment, of each 1 fl. oz.
Mix.	Macerate the Soap and Opium in the Spirit for 3 days; filter, add the Oil and Camphor, and agitate briskly.	Mix them with agitation.

USE.—As an Embrocation in rheumatic pains, neuralgia, &c.

LINIMENTUM SAPONIS.

Soap - - - - - - 2½oz. Camphor - - - - - ʒ x. Spirit of Rosemary - 18 fl. oz. Distilled Water - - 2 fl. oz.	Castile Soap - - - - 5oz. Camphor - - - - - 2½oz. Volatile Oil of Rosemary fl. ʒ vi. Rectified Spirit - - 2 pints.	Castile Soap in powder - 2oz. Camphor - - - - - 1oz. Proof Spirit - - - 16 fl. oz.

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
Mix the water with the Spirit, then add the Soap and Camphor, and macerate, frequently shaking them, until they are liquefied.	Digest the Soap in the Spirit for 3 days; add the Camphor and Oil, and agitate briskly.	Dissolve the Soap in the Spirit with a gentle heat, then add the Camphor, and, when it is dissolved, filter through paper; or allow it to stand for some time, and decant the clear liniment.

In the Pharm. L. 1836, the Soap was in too great a quantity, and easily deposited on diminution of temperature. The alteration in the present Pharmacopœia is to remedy that inconvenience.

LINIMENTUM SIMPLEX.

Not in Pharm.	Olive Oil - - - - 4 parts. White Wax - - - 1 part. Dissolve the Wax in the Oil with a gentle heat; and agitate well as the fused mass cools and concretes.	Not in Pharm.

LINIMENTUM TEREBINTHINÆ.

Soft Soap - - - - - 2oz. Camphor - - - - - 1oz. Oil of Turpentine - 16 fl. oz. Shake together until they are well mixed.	Resinous Ointment - - 4oz. Camphor - - - - - ½oz. Oil of Turpentine - 5 fl. oz. Melt the Ointment, and gradually mix with it the Camphor and Oil, till a uniform liniment be obtained.	Ointment of Resin - - 8oz. Oil of Turpentine - 5 fl. oz. Melt the Ointment, then add the Oil of Turpentine gradually, and stir the mixture until a uniform liniment is obtained.

USE.—A stimulating application.

LIQUOR ALUMINIS COMPOSITUS.

Alum, Sulphate of Zinc, of each 1oz. Distilled Water - - 3 pints. Rub the Alum and Sulphate together; dissolve them in the water; and strain.	Not in Pharm.	Not in Pharm.

USE.—A powerful astringent lotion.

LIQUOR AMMONIÆ.

In the Mat. Med. (No process given.) Sp. Gr. ·960.	For the process, (*Vide* Appendix.) Sp. Gr. ·960.	For the process, (*Vide* Appendix.) Sp. Gr. ·950.

TEST.—Is free from colour. Exposed to air, it escapes in very acrid, alkaline, fugitive vapours, as shown by turmeric. A solution of Lime being added, it throws nothing down (absence of Carbonates); is not coloured by Hydrosulphuric Acid (absence of metals); nor, when it has first been saturated by Nitric Acid, does it give any precipitate on the addition of either Sesquicarbonate of Ammonia, or Nitrate of Silver, or Chloride of Barium, (if Salts of the Earths, Chlorides, and Sulphates are absent). Nearly 10 grains of Ammonia are contained in 100 grains of solution. It ought not to have the slightest taint of Gas-tar odour, as much of the Ammonia is now prepared from the refuse water of Gas-works.

DOSE.—10 to 20 minims, in some bland fluid, as a stimulant and antacid.

LIQUOR AMMONIÆ ACETATIS.

LONDON.	**EDINBURGH.**	**DUBLIN.**
	Aqua Ammoniæ Acetatis.	AVOIRDUPOIS WEIGHT.
Dilute Acetic Acid - 1 pint. Sesquicarbonate of Ammonia ʒ ix. or as much as may be necessary.	Distilled Vinegar (from French Vinegar in preference) 24 fl. oz. (Sp. Gr. 1·005.) Carbonate of Ammonia - 1oz.	Dilute Acetic Acid - 3 pints. Sesquicarbonate of Ammonia, 2½oz., or a sufficient quantity.
Add to the Acid the Sesquicarbonate to saturation.	Mix them and dissolve the salt. If the solution has any bitterness, add by degrees a little distilled Vinegar till that taste be removed.	To the Acid, introduced into a bottle, gradually add the Sesquicarbonate of Ammonia to saturation, and dissolve by shaking, but without the aid of heat.
(Sp. Gr. 1·022.)	(Sp. Gr. 1·011.)	(Sp. Gr. 1·012.)

TEST.—Free from colour and odour; neither the colour of litmus nor turmeric are changed by it. It is not coloured by Hydrosulphuric Acid, neither is anything thrown down on the addition of Chloride of Barium; showing the absence of metallic impregnations, and also that of Sulphates. What is precipitated by Nitrate of Silver is soluble in water, but especially so in Nitric Acid; absence of Chlorides. Potash being added, it emits Ammonia; and Sulphuric Acid being added, it gives off acetous vopours. The fluid being evaporated, what remains is destroyed by heat.

DOSE.—From 2 to 6 drachms. Used externally as a refrigerant lotion.

INCOMPATIBLES.—Acids, Potash, Soda, and their Carbonates, Lime Water, Salts of Lead, Silver, and Metallic Sulphates.

LIQUOR AMMONIÆ CITRATIS.

Citric Acid - - - - 3oz. Distilled Water - - 1 pint. Sesquicarbonate of Ammonia, 2½oz., or as much as may be sufficient.	Not in Pharm.	Not in Pharm.
Dissolve the Acid in the water, and add the Sesquicarbonate to saturation.		

Now introduced by the London College.

LIQUOR AMMONIÆ FORTIOR.

In the Mat. Med. (No process given.)	For the process, (*Vide* Appendix.)	For the Process, (*Vide* Appendix.)
Sp. Gr. ·882.	Sp. Gr. ·880.	Sp. Gr. ·900.

It can be reduced to the standard of the weaker Solution of Ammonia, by the addition of 2 ounces of Distilled Water to each ounce of this solution. It contains nearly 30 grains of Ammonia in each 100 grains.—LOND. 1 fluid ounce, of density 880, with 2½ fluid ounces of water, is ordered by Edinburgh to make Aqua Ammoniæ. Sp. Gr. ·960.

LIQUOR AMMONIÆ SESQUICARBONATIS.

	Aqua Ammoniæ Carbonatis.	
Sesquicarbonate of Ammonia 4oz.	Carbonate of Ammonia - 4oz.	Not in Pharm.
Distilled Water - - 1 pint.	Distilled Water - - 1 pint.	
Dissolve and strain.	Dissolve the salt on the water.	

DOSE.—From 30 to 40 minims, as an antacid.

LIQUOR ANTIMONII TARTARIZATI.

Vide Vinum Antimonii Potassio-Tartratis.

LONDON.	**EDINBURGH.**	**DUBLIN.**

LIQUOR ANTIMONII TERCHLORIDI.

Not in Pharm.	Not in Pharm.	AVOIRDUPOIS WEIGHT. A Process. (*Vide* Appendix.)

Used by the Dublin College for making Oxydum Antimonii.

LIQUOR ARSENICALIS.

Vide Liquor Potassæ Arsenitis.

LIQUOR ARSENICI CHLORIDI.

Arsenious Acid, broken into small pieces - - - ʒss. Hydrochloric Acid - fl. ʒiss. Distilled Water - - 1 pint. Boil the Arsenious Acid with the Hydrochloric Acid, mixed with an ounce of water until it be dissolved, then add water sufficient to measure accurately 1 pint. A fluid oz. contains 1½ grain.	Not in Pharm.	Not in Pharm.

This is the celebrated Solutio Solventis Mineralis of Dr. De Valangin, which has hitherto been obtained from Apothecaries Hall. Dr. Pereira states that Dr. Farre has found it cure the worst forms of Chorea. It appears to be merely a solution of Arsenious Acid in Hydrochloric Acid. That it is a Chloride of Arsenic, as stated by Dupasquier, is questionable.

DOSE.—Dr. Farre commences with 3 minims three times a day, and, after a few days, increases it one drop per diem, (not each dose,) till the patient takes 10 drops three times a day.

LIQUOR ARSENICI ET HYDRARGYRI HYDRIODATIS.

Not in Pharm.	Not in Pharm. Arsenic ʒß Mercury ʒiß Iodine ʒ[illegible] Alcohol ʒ[illegible] distilled water 4 oz	Pure Arsenic, in fine powder 6 grains. Pure Mercury - 16 grains. Pure Iodine - - 50½ grains. Alcohol - - - - - fl. ʒss. Distilled Water, 9oz., or a sufficient quantity. Rub together the Arsenic, Mercury, Iodine, and Spirit, until a dry mass is obtained, and, having triturated 8oz. of the water with this in successive portions, let the whole be transferred to a flask, and heated until it begins to boil. When cooled and filtered, let as much distilled water be added to it as will make the bulk of the solution exactly 8 fluid oz. and ʒvi.

This is Mr. Donovan's solution.

DOSE.—From 10 minims to half a drachm, in Lepra and in other skin diseases.

INCOMPATIBLES.—Acids, most Salts, Opium, and the Salts of Morphia.

LIQUOR BARII CHLORIDI.

LONDON.	EDINBURGH.	DUBLIN.
	Solutio Barytæ Muriatis.	AVOIRDUPOIS WEIGHT.
In the Appendix of the Ph. Lond.	Muriate of Baryta - - ʒi.	Chloride of Barium - - 1oz.
Chloride of Barium - - ʒi. Distilled Water - - 1 fl. oz.	Distilled Water - - 1 fl. oz.	Distilled Water - - - 8oz.
Dissolve and strain.	Dissolve the salt in the water.	Dissolve and filter through paper. (Sp. Gr. 1·088.)

DOSE.—5 to 10 minims, properly diluted, in scrofulous cases, but now rarely used.

INCOMPATIBLES.—All Sulphates and Alkalies, and their Carbonates, Opium and its preparations.

LIQUOR CALCII CHLORIDI.

	Solutio Calcis Muriatis.	
Not in Pharm.	Muriate of Lime - - 8oz. Water - - - - 12 fl. oz.	Chloride of Calcium - 3oz. Distilled Water - - 12oz.
	Dissolve the salt in the water.	Dissolve and filter through paper. (Sp. Gr. 1·225.)

Edin. nearly three times the strength of Dublin.

DOSE.—From half a drachm to 2 drachms, diluted with water, in glandular diseases.—DUBLIN.

INCOMPATIBLES.—Alkalies and their Carbonates, Sulphuric Acid and Sulphates.

LIQUOR CALCIS.

	Aqua Calcis.	
Lime - - - - - - ½ lb. Distilled Water - 12 pints.	Take any convenient quantity of water; pour a little of it over about a twentieth of its weight of Lime; when the Lime is slaked, add it to the rest of the water in a bottle; agitate well; allow the undissolved matter to subside; pour off the clear liquor when it is wanted, replacing it with more water, and agitating briskly as before.	Fresh burned Lime - - 2oz. Distilled Water - ½ gallon.
Upon the Lime, first slaked with a little of the water, pour the remainder of the water, and shake them together; immediately cover the vessel, and set it aside for 3 hours; then keep the solution with the remaining Lime in stopped glass vessels; and when it is to be used, take the clear solution.		Having slaked the Lime with an ounce and a half of the water, introduce it into a well-stopped bottle, containing the remainder of the water, and shake well for the space of 5 minutes. After 12 hours the excess of Lime will have subsided, and the clear Lime-water may be drawn off with a syphon as it may be required. When the entire of the solution has been withdrawn, it may be renewed by shaking the sediment at the bottom of the bottle with another ½ gallon of water; and if the Lime be pure, and the bottle be accurately stopped, this process may be successfully repeated 3 or 4 times.

Water, when *cold*, dissolves Lime best; hence at 32° a pint will dissolve 13·25 grains.
60° „ 11·6 „
212° „ 6·7 „

So that at 32° it takes up nearly one-seventh more Lime than water at 60°, and almost double that of 212°.

DOSE.—1 to 4 ounces, in milk or alone, as an antacid.

TEST.—A colourless, inodorous liquid; taste disagreeably alkaline; browns turmeric paper, and easily rendered turbid by breathing into it by a glass tube; should be kept closely stopped.

INCOMPATIBLES.—The Vegetable and Mineral Acids, Alkaline and Metallic Salts, and Vegetable Infusions.

LIQUOR CALCIS CHLORINATÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Chlorinated Lime - - ½ lb. Water - - - - ½ gallon. Blend well the water and Chlorinated Lime by trituration in a large mortar, and, having transferred the mixture to a stoppered bottle, let it be well shaken several times for three hours. Pour out now the contents of the bottle on a calico filter, and let the solution which passes through, be preserved in a well-stopped bottle. Sp. Gr. 1·035. A fluid ounce contains nearly 44 grains of Chlorinated Lime.

DOSE.—20 to 40 minims, in advanced stages in Typhoid Fever, applied externally to foul ulcers.

INCOMPATIBLES.—Sulphuric Acid and its Salts, the Alkalies, and all soluble Carbonates and Oxalates.

LIQUOR CHLORINII.

LONDON.	EDINBURGH.	DUBLIN.
In the Appendix of the P. L. Hydrochlorie Acid - fl. 1oz. Binoxide of Manganese, powdered - - - - - ʒ ii. Distilled Water - - ½ pint. Mix the Acid and Binoxide in a retort, then pass the Chlorine through the water until the gas has almost ceased to be given off.	*Aqua Chlorinei.* Muriate of Soda - 60 grains. Sulphuric Acid (Commercial) fl. ʒ ii. Red Oxide of Lead 350 grains. Water - - - - - - 8 fl. oz. Triturate the Muriate of Soda and Oxide together; put them into the water contained in a bottle with a glass-stopper; add the Acid; agitate occasionally till the Red Oxide becomes almost all white. Allow the insoluble matter to subside before using the liquid.	Muriate Acid of Commerce 3 fl. oz. Peroxide of Manganese in fine powder - - - - - ½oz. Distilled Water - - 24oz. Introduce the Peroxide of Manganese into a gas bottle, and, having poured upon it the Muriatic Acid diluted with 2oz. of water, apply a gentle heat, and, by suitable tubes, cause the gas, as it is developed, to bubble through 2 additional ounces of the water placed in an intermediate small phial, and then to pass to the bottom of a 3 pint bottle containing the remainder of the water, whose mouth is loosely plugged with tow. When the air has been entirely displaced by Chlorine, let the bottle be disconnected from the apparatus in which the gas is generated, corked loosely, and shaken until the Chlorine is absorbed. It should be now transferred to a pint bottle with a well-ground glass stopper, and preserved in a cool and dark place.

DOSE.—Half a drachm to 1 drachm, diluted with water, in advanced stages of Scarlatina and Typhoid Fevers.

The Dublin is decidedly the safest process for pure Chlorine in solution; the Edinburgh must necessarily have Soda in solution with the Chlorine; and the London does not provide against accidental rising of the ingredients in the retort; also it is difficult to saturate the water, without applying heat to the retort.

Chlorate Potass 8 [illegible] Hydrochloric 3 [illegible] put into a pint bottle and shake at intervals with water 1 oz until bottle is full – [illegible] in [illegible] of Chlorine [illegible] [illegible] [illegible] Cl ink –

LIQUOR CUPRI AMMONIO-SULPHATIS.

	Solutio Cupri Ammoniati.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Ammonio-Sulphate of Copper ʒi.	Ammoniated Copper - ʒi.	
Distilled Water - - 1 pint.	Water - - - - - 1 pint.	
Dissolve and strain.	Dissolve the salt in the water and filter.	

USE.—Largely diluted for Eye Water, but not much employed.

LIQUOR FERRI PERNITRATIS.

Not in Pharm.	Not in Pharm.	Fine Iron Wire, free from rust 1oz. Pure Nitric Acid - 3 fl. oz. Distilled Water, a sufficient quantity. Into the Acid, first diluted with 16oz. of the water, introduce the iron wire, and leave them in contact until gas ceases to be disengaged. Filter the solution, and to it add as much water as will make its bulk 1¼ pint. Sp. Gr. 1·107.

DOSE.—Half a drachm to 1 drachm, diluted with water.

INCOMPATIBLES.—All astringent Vegetable Infusions, Decoctions, or Syrups.

LIQUOR HYDRARGYRI BICHLORIDI.

Bichloride of Mercury, Hydrochlorate of Ammonia, of each 10 grains. Distilled Water - - 1 pint. Dissolve.	Not in Pharm.	Not in Pharm.

One ounce of this Solution contains half a grain of the Bichloride.

DOSE.—Half a drachm to 2 drachms, as an alterative.

INCOMPATIBLES.—Alkalies and their Carbonates, Lime, Tartar Emetic, Iodide of Potassium, Nitrate of Silver, Acetate of Lead, Albumen, Soaps, Almond Emulsion, Decoction of Bark, and astringent Vegetables.

LIQUOR HYDRARGYRI ET ARSENICI HYDRIODATIS.

Vide Liquor Arsenici et Hydrargyri Hydriodatis.

LIQUOR HYDRARGYRI PERNITRATIS.

Not in Pharm.	Not in Pharm.	Pure Mercury - - - 2oz. Pure Nitric Acid - 1½ fl. oz. Distilled Water - - 1½oz. In the Acid, first diluted with the water, dissolve the Mercury, with the application of heat, and evaporate the solution to the bulk of two ounces and a half.

This is the Acid Nitrate of Mercury which has been so much used on the Continent as a caustic application.

LONDON. **EDINBURGH.** **DUBLIN.**

LIQUOR IODINEI COMPOSITUS.

AVOIRDUPOIS WEIGHT.

Vide Liquor Potassii Iodidi Compositus.

LIQUOR MORPHIÆ ACETATIS.

Acetate of Morphia - ʒ iv.	Not in Pharm.	Acetate of Morphia 82 grains.
Acetic Acid - - minims xv. (30·8 per cent.)		
Distilled Water - - 1 pint.		Distilled Water - - - 15oz.
Proof Spirit - - - ½ pint.		Rectified Spirit - - 5 fl. oz.
Mix and dissolve.		Having added the Spirit to the water, dissolve the Acetate of Morphia in the mixture, and, if the solution is not quite clear, pass it through a paper filter.
fl. ʒ i. contains 1 grain.		fl. ʒ i. contains half a grain.

DOSE.—15 minims.—LONDON. 30 minims.—DUBLIN.

Acetate of Morphia, if not very carefully dried, parts with some of the acid, and would not all dissolve, except on the addition of a little Acetic Acid. It will be well to remember this, before filtering the Solution, as directed in the Dublin Pharm.

LIQUOR MORPHIÆ HYDROCHLORATIS.

	Solutio Morphiæ Muriatis.	
Hydrochlorate of Morphia ʒ iv	Muriate of Morphia - ʒ iss.	Muriate of Morphia - ʒ iss.
		Distilled Water - - - 15oz.
Distilled Water - - 1 pint.	Distilled Water - 15 fl. oz.	Rectified Spirit - - fl. 5oz.
Proof Spirit - - - ½ pint.	Rectified Spirit - - 5 fl. oz.	
Mix and dissolve.	Mix the Spirit and water, and dissolve the Muriate of Morphia, in the Mixture with the aid of a gentle heat.	Mix the Spirit and water, dissolve the Muriate of Morphia in the mixture, and, unless the solution be quite clear, pass it through a paper filter.
One fl. ʒ contains one grain.	One fl. ʒ contains a fraction more than half a grain.	One fl. ʒ contains half a grain.

It is much to be regretted that solutions of Morphia differ so widely in strength.

DOSE of London, 15 minims, and 30 minims for Edinburgh and Dublin.

LIQUOR PLUMBI DIACETATIS.

	Solutio Plumbi Diacetatis.	*Liquor Plumbi Subacetatis.*
Acetate of Lead 2 lb. and 3oz.	Acetate of Lead 6oz. and ʒ vi.	Acetate of Lead - - - 6oz.
Oxide of Lead, in powder, 1 lb. and 4oz.	Litharge, in fine powder 4oz.	Litharge, in fine powder - 4oz.
Distilled Water - - 6 pints.	Water - - - - - 1½ pint.	Distilled Water - - 2 pints.
Boil them for half an hour, frequently stirring, and when the liquor is cold add of distilled water as much as may be necessary, that it may accurately measure 6 pints;	Boil the salt and Litharge with the water for half an hour, stirring occasionally. When the solution is cold, add water, if necessary, to make up 1½ pint; and then filter.	Dissolve the Acetate of Lead in the water, and when the solution is raised to its boiling temperature, add the Litharge in successive portions, and boil gently for

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
lastly strain. Let it be kept in well-closed vessels. Sp. Gr. 1·260.	Preserve the solution in well-closed bottles.	half an hour. Add now as much distilled water as will supply what has been lost by evaporation, and filter through paper into a bottle, which should be furnished with an air-tight stopper. Sp. Gr. 1·066.

The London and Edinburgh are about the same strength; the Dublin weaker.

USE.—Externally; diluted largely as a lotion, or collyrium.

TEST.—A clear liquid; chemical characters like those of Acetate of Lead, excepting the last.

INCOMPATIBLES.—Hard Water, Mineral and Vegetable Acids and their Salts, Lime Water, Alkalies, Iodide of Potassium' preparations of Opium, Albuminous liquids, and Vegetable Infusions.

LIQUOR PLUMBI DIACETATIS DILUTUS.

		Liquor Plumbi Subacetatis Compositus.
Solution of Diacetate of Lead fl. ℥ iss. Distilled Water - - 1 pint. Proof Spirit - - - fl. ℥ ii. Mix.	Not in Pharm.	Solution of Subacetate of Lead, Proof Spirit, of each - 2 fl. oz. Distilled Water - ½ gallon. Mix, filter, and preserve in a well stopped bottle.

London is half the strength of Dublin.

USE.—As a cooling lotion.

INCOMPATIBLES.—Same as Liq. Plumbi Diacetatis.

LIQUOR POTASSÆ.

	Aqua Potassæ.	*Liquor Potassæ Causticæ.*
Carbonate of Potash - 15oz. Lime - - - - - - 8oz. Boiling Distilled Water 1 gall.	Carbonate of Potash (dry) 4oz. Lime recently burnt - 2oz. Water - - - - 45 fl. oz.	Pure Carbonate of Potash 1 lb. Fresh-burned Lime - 10oz. Distilled Water 1 gall. and 7oz.
Dissolve the Carbonate in a half gallon of water, sprinkle a little of the water on the Lime in an earthen vessel, and the Lime being slaked, add the rest of the water. The solutions being immediately mixed in a closed vessel shake them frequently until they are cold. Then set by, that the Carbonate of Lime may subside. Lastly, keep the supernatant liquor, when	Let the Lime be slaked and converted into milk of Lime with 7 fluid ounces of the water. Dissolve the Carbonate in the remaining 38 fluid ounces of water; boil the solution, and add to it the Milk of Lime in successive portions, about one-eighth at a time, boiling briskly for a few minutes after each addition. Pour the whole into a deep narrow	Slake the Lime with 7oz. of the water. Dissolve the Carbonate of Potash in the remainder of the water, and having raised the solution to the boiling point in a clean iron vessel, gradually mix with it the slaked Lime, and continue the ebullition for 10 minutes with constant stirring. Remove the vessel now from the fire, and when, by the subsidence of the in-

CONTINUED.

AVOIRDUPOIS WEIGHT.

LONDON.	EDINBURGH.	DUBLIN.
poured off, in a well-stopped green glass vessel.	glass vessel for 24 hours; and then withdraw with a syphon the clear liquid, which should amount to at least 35 fluid ounces.	soluble matters, the supernatant liquor has become perfectly clear, transfer it by means of a syphon to a green glass bottle furnished with an air-tight stopper.
Sp. Gr. 1·063.	Sp. Gr. 1·072.	Sp. Gr. 1·068.
In 100 grains there are contained 6·7 grs. of Potash.		

It should not be exposed to the air, as it quickly absorbs Carbonic Acid. If it has been thus deteriorated, acids mixed with it cause effervescence.

DOSE.—10 to 40 minims, largely diluted in water, Beer, or aromatic bitter Infusion, but not in Sarsaparilla Mixture which is intended to be kept any time, because after a few days it undergoes change, and therefore Liq. Potassæ is best added to each dose when required.

TEST.—A colourless liquid; Sulphuric Acid does not occasion effervescence.—EDIN. Nothing, or scarcely anything, is thrown down from this solution by the addition of Lime Water, showing the absence of Carbonate of Potash; nor if it has been first saturated by Nitric Acid, on Carbonate of Soda, Chloride of Barium, or Nitrate of Silver being added, does anything fall, shewing the absence of Alumina, Sulphates, and Chlorides. What is thrown down by Bichloride of Platinum is yellowish; this is an insoluble double salt, consisting of Chloride of Potassium and Chloride of Platinum; the Liquor Sodæ (if free from Potash), would give no such reaction.

LIQUOR POTASSÆ ARSENITIS.

	Liquor Arsenicalis.	*Liquor Arsenicalis.*
Arsenious Acid, in small pieces, Carbonate of Potash, of each 80 grains. Compound Tincture of Lavender - - - - - fl. ʒv. Distilled Water - - 1 pint.	White Arsenic, in powder, Carbonate of Potash, of each 80 grains. Compound Tincture of Lavender - - - - - fl. ʒv. Water - - - - - 1 pint.	Pure Arsenious Acid, Pure Carbonate of Potash, of each 82 grains. Compound Tincture of Lavender - - - - - ½ fl. oz. Distilled Water, as much as is sufficient.
Boil the Acid and Carbonate with half a pint of water until they are dissolved. To the cold liquor add the Tincture, and lastly, as much of the water as may be requisite, that it may accurately measure 1 pint.	Dissolve the Oxide and Carbonate together in half the water, with the aid of heat; filter if necessary; add the Tincture to the Liquid when cold, and then dilute it with water till the whole measures 1 pint.	Introduce the Arsenious Acid and Carbonate of Potash into a flask containing half a pint of water, and boil until a perfect solution is obtained. When this has cooled, add to it the compound Tincture of Lavender, and as much water as will make the bulk of the entire 1 pint.
		Sp. Gr. 1·013.
A fluid drachm contains half a grain.	A fluid drachm contains half a grain.	A fluid drachm contains rather more than half a grain.

It is commonly known as Fowler's Solution.

DOSE.—5 to 10 minims twice a day in chronic cutaneous diseases.

INCOMPATIBLES.—Iron Salts, Magnesian Salts, Astringent Matters, Lime Water.

LIQUOR POTASSÆ CARBONATIS.

Carbonate of Potash - 20oz. Distilled Water - - 1 pint.	Not in Pharm.	Pure Carbonate of Potash 10oz. Distilled Water - - 1 pint.
Dissolve and strain.		Dissolve and filter.
Sp. Gr. 1·473.		Sp. Gr. 1·310.

London twice the strength of Dublin.

DOSE.—10 to 60 minims in milk.—LOND.

LIQUOR POTASSÆ EFFERVESCENS.

AVOIRDUPOIS WEIGHT.

Vide Aqua Potassæ Effervescens.

LIQUOR POTASSII IODIDI COMPOSITUS.

	Liquor Iodinei Compositus.	
Iodide of Potassium 10 grains.	Iodide of Potassium - 1oz.	Iodide of Potassium 10 grains.
Iodine - - - - 5 grains.	Iodine - - - - - - ʒ ii.	Pure Iodine - - 5 grains.
Distilled Water - - 1 pint.	Distilled Water - 16 fl. oz.	Distilled Water - - 1 pint.
Mix, that they may be dissolved.	Dissolve the Iodide and Iodine in the water with gentle heat and agitation.	Mix and dissolve.

The Edinburgh preparation has been classed with the London and Dublin, being composed of the same materials, but it contains 60 times more Iodide of Potassium, and 30 times more Iodine than the other colleges.

DOSE of London and Dublin, 1 to 4 drachms; Edin. 5 to 10 minims.

INCOMPATIBLES.—Acids, Acidulous and Metallic Salts.

LIQUOR SODÆ.

		Liquor Sodæ Causticæ.
Carbonate of Soda - 31oz. (Crystallized).	Not in Pharm.	Crystallized Carbonate of Soda of Commerce - - - 2lb.
Lime - - - - - - - 9oz.		Fresh-burned Lime - 10oz.
Boiling Distilled Water 1 gall.		Distilled Water 1 gall. and 7oz.
Prepare the solution in the same manner as directed for Liquor Potassæ.		Slake the lime with 7oz. of the water. Dissolve the Carbonate of Soda in the remainder of the water, and having raised the solution to the boiling point in a clean iron vessel, gradually mix with it the slaked Lime, and continue the ebullition for 10 minutes with constant stirring. Remove the vessel now from the fire, and when, by the subsidence of the insoluble matters, the supernatant liquor has become perfectly clear, transfer it by means of a syphon to a green glass bottle, furnished with an air-tight stopper.
Sp. Gr. 1·061.		Sp. Gr. 1·056.
In 100 grains are contained 4 grains of Soda.		

Its chemical characters, the last excepted, correspond to those under Liquor Potassæ.

The London have probably introduced this, for making hard Soap. The Dublin for preparing the Valerianate of Soda.

LIQUOR SODÆ CARBONATIS.

Not in Pharm.	Not in Pharm.	Crystallized Carbonate of Soda of Commerce - - - 1½oz.
		Distilled Water - - 1 pint.
		Dissolve and filter.
		Sp. Gr. 1·026.

LIQUOR SODÆ CAUSTICÆ.

AVOIRDUPOIS WEIGHT.

Vide Liquor Sodæ.

LIQUOR SODÆ CHLORINATÆ.

Carbonate of Soda - - 1 lb. Distilled Water - 48 fl. oz. Chloride of Sodium - - 4oz. Binoxide of Manganese - 3oz. Sulphuric Acid - - 2½ fl. oz. Dissolve the Carbonate in 2 pints of water, then put the Chloride and Binoxide, rubbed to powder, into a retort, and add to them the Acid, first mixed with 3 fluid ounces of water, and cooled. Heat the mixture, and pass the Chlorine first through 5 fluid ounces of water, and afterwards through the solution of Carbonate above directed.	Not in Pharm.	Chlorinated Lime - - ½ lb. Water - - - - ½ gallon. Crystallized Carbonate of Soda of Commerce - - - 7oz. Blend well by trituration in a mortar the Chlorinated Lime with 3 pints of the water, and, having transferred the mixture to a stoppered bottle, let this be well shaken several times for the space of three hours. Pour out the contents of the bottle on a calico cloth, and to the filtered solution add the Carbonate of Soda dissolved in the remaining pint of water. Having stirred the mixture well for 10 minutes, separate the liquid by a second filtration, and preserve it in a well-stopped bottle. Sp. Gr. 1·034.

DOSE.—20 to 30 minims in a draught of water. Used also when diluted in gargles.

TEST.—At first the colour of Turmeric applied to this solution is altered to brown; speedily it is destroyed. Dilute Hydrochloric Acid being added, Carbonic Acid and Chlorine are evolved together; solution of Sulphate of Indigo is decolourized by the Chlorine. Lime water produces with it a precipitate of Carbonate of Lime.

The process of the London is to be preferred to the Dublin.

LIQUOR SODÆ EFFERVESCENS.

Vide Aqua Sodæ Effervescens.

LIQUOR ZINCI CHLORIDI.

Not in Pharm.	Not in Pharm.	A process. (*Vide* Appendix.)

This deodorising agent was first proposed by Sir William Burnett. Its specific gravity is 2·0, whereas the Dublin is 1593.

MAGNESIA.

Carbonate of Magnesia - 1 lb. Burn it in a very strong fire for 2 hours.	Take any convenient quantity of Carbonate of Magnesia, expose it in a crucible to a full red heat for 2 hours, or till the powder, when suspended in water, presents no effervescence on the addition of Muriatic Acid. Preserve the product in well-closed bottles.	Carbonate of Magnesia, any convenient quantity. Introduce it into a clay crucible closed loosely by a lid, and let this be exposed to a low red heat as long as the Magnesia, taken from the central part of the crucible, when cooled, and dropped into dilute Sulphuric Acid, continues to give rise to effervescence. Let the product be preserved in well-closed bottles.

CONTINUED.

DOSE.—10 to 30 grains as an antacid, preferred to the Carbonate when the bowels are distended with flatus. It occasionally solidifies in draughts and mixtures, especially when prescribed with Sulphate of Magnesia.

INCOMPATIBLES.—Acids, Acidulous Salts, Metallic Salts, and Muriate of Ammonia.

TEST.—Being moistened with water, it slightly changes the colour of Turmeric to brown.—LOND. Fifty grains are entirely soluble, without effervescence, in a fluid ounce of Muriatic Acid: an excess of Ammonia occasions in the solution only a scanty precipitate of Alumina: the filtered fluid is not precipitated by solution of Oxalate of Ammonia—(absence of Lime).—EDIN. Nothing is thrown down from the solution in Hydrochloric Acid on the addition of either Bicarbonate of Potash or Chloride of Barium, (absence of Alumina and Sulphates).—LOND.

MAGNESIÆ CARBONAS.

		AVOIRDUPOIS WEIGHT.
Sulphate of Magnesia - 4 lb. Carbonate of Soda 4 lb. and 9oz. Boiling Distilled Water 4 gall.	Sulphate of Magnesia - 4 lb. Carbonate of Soda 4 lb. and 8oz. Water - - - - 4 gallons.	Sulphate of Magnesia of Commerce - - - - - 10oz. Crystalized Carbonate of Soda of Commerce - - - 12oz. Distilled Water a sufficient quantity.
Dissolve the Carbonate and Sulphate separately in 2 gallons of water, and filter; then mix the solutions and boil for two hours, constantly stirring with a spatula, distilled water being frequently added that it may fill nearly the same measure; lastly, the solution being poured off, wash the precipitated powder with boiling distilled water, and dry it.	Dissolve the salts separately, each in two gallons of water; mix the solutions, boil the mixture, and stir briskly for 15 or 20 minutes. Collect the precipitate on a filter of calico or linen, wash it thoroughly with boiling water, and then dry it.	Dissolve each salt in 2 quarts of water, mix the two solutions cold, and boil the mixture for 10 minutes; transfer the precipitate to a calico filter, and pour upon it, repeatedly, boiling water, until the washings cease to give a precipitate with a solution of Nitrate of Barytes; lastly, dry by a heat not exceeding 212°.

The London College has now ordered *boiling* water.

DOSE.—15 to 30 grains as an Antacid; 1 to 2 drachms as a Laxative.

INCOMPATIBLES.—Same as Magnesia.

TEST.—When dissolved in an excess of Muriatic Acid, an excess of Ammonia occasions only a scanty precipitate of Alumina; and the filtered fluid is not precipitated by Oxalate of Ammonia, (shewing the absence of Lime).—Edin. It is soluble in dilute Sulphuric Acid with effervescence, from which solution nothing is thrown down by Bicarbonate of Potash, (also shewing the absence of Alumina and other Earths:) water in which it has been boiled does not change the colour of Turmeric to brown, nor is anything thrown down on the addition of Chloride of Barium or Nitrate of Silver,—(absence of Alkalies, Sulphates, and Chlorides).—Lond.

MAGNESIÆ CARBONAS PONDEROSUM.

Not in Pharm.	Not in Pharm.	Sulphate of Magnesia of Commerce - - - - - 10oz. Crystallized Carbonate of Soda of Commerce - - 12oz. Boiling Distilled Water, a sufficient quantity.
		Dissolve the Sulphate of Magnesia in ½ pint, and the Carbonate of Soda in a pint of the water; mix the two solutions, and evaporate the whole to dryness by means of a sand heat; digest the residue for ½ hour with 1 quart of boiling distilled water, and having collected the insoluble matter on a calico filter, treat it repeat-

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT. edly with warmly distilled water until the washings cease to give a precipitate when suffered to drop into a solution of Nitrate of Barytes; finally, dry the product at a heat not exceeding 212°.

DOSE.—As an Antacid from 5 to 20 grains; as a purgative 1 scruple to 1 drachm.

INCOMPATIBLES.—Same as Magnesia.

MEL BORACIS.

Borax, in powder - - - ʒi.	Borax - - - - - - - ʒi.	Borax, in fine powder - ʒi.
Honey, clarified - - - 1oz.	Honey - - - - - - 1 oz.	Clarified Honey, *by weight* 1oz.
Mix.	Mix them.	Mix them well together by trituration.

USE.—Application to apthous ulcerations.

MEL DEPURATUM.

In the Mat. Med. (No process given.)	Not in Pharm.	Fine Honey, any quantity. Melt it in a water bath, and strain it while hot through flannel.

MEL ROSÆ.

Dried Red Rose - - - 4oz.	Dried Petals of Rosa Gallica, 4oz.	Not in Pharm.
Boiling Distilled Water 24oz.	Boiling Water - - 2½ pints.	
Honey - - - - - - - 5lb.	Honey - - - - - - 5lb.	
Macerate the rose petals, first separated in 16 fl. oz. of the water, for 2 hours, then lightly press with the hand, and strain; what remains, macerate again for a little time in the rest of the water, and pour off the liquor; to this add the half of the first infusion, and set aside the other half; then to the Honey add the mixed Liquors, and evaporate in a water bath, so that the solution which was set aside, being added, it may become a proper consistence.	Infuse the Petals in the water for 6 hours; strain and squeeze; let the impurities subside; pour off the clear liquor; mix the Honey with it, and evaporate the whole in the vapour bath to the consistence of Syrup, removing the scum which forms.	

USE.—As an adjunct to astringent gargles.

LONDON.	EDINBURGH.	DUBLIN.
	MISTURA ACACIÆ.	
	Mucilago.	AVOIRDUPOIS WEIGHT. *Mucilago Acacia.*
Powdered Gum Acacia 10oz. Boiling Distilled Water 1 pint.	Gum-Arabic - - - - 9oz. Water (cold) - - - 1 pint.	Gum-Arabic - - - - 4oz Water - - - - - - - 6oz.
Rub the Acacia with the water gradually poured in, until it be dissolved.	Mix them; allow the gum to dissolve without applying heat, but with occasional stirring; then strain through linen or calico.	Dissolve the gum in the water with occasional stirring; then strain through flannel.
	MISTURA ACACIÆ.	
Not in Pharm.	Mucilage - - - - 3 fl. oz. Sweet Almonds - - - ℥ x. Pure Sugar - - - - ℥ v. Water - - - - 2 pints.	Not in Pharm.
	Steep the Almonds in hot water, and peel them; beat them to a smooth pulp in an earthenware or marble mortar, first with the Sugar and then with the Mucilage; add the water gradually, stirring constantly; then strain through linen or calico.	
	MISTURA ALTHÆÆ.	
Not in Pharm.	Althæa Root, dried - - 4oz. Raisins, freed of the Seeds 2oz. Boiling Water - - 5 pints.	Not in Pharm.
	Boil down to 3 pints; strain through linen or calico, and when the sediment has subsided, pour off the clear liquor for use.	
	MISTURA AMMONIACI.	
Prepared Ammoniacum ℥ v. Distilled Water - - 1 pint.	Not in Pharm.	Gum Ammoniac - - - ℥ ii. Water - - - - - - - 8oz.
Rub the Ammoniacum with the water, gradually added, until they are perfectly mixed.		Triturate the Gum with the water gradually added, until the mixture assumes the appearance of milk; then strain through muslin.

DOSE.—Half an ounce to an ounce, as an expectorant; may be combined with Tincture of Squills.

	MISTURA AMYGDALÆ.	
Confection of Almond - 2½oz. Distilled Water - - 1 pint.	Conserve of Almonds - 2oz. Water - - - - - - 2 pints.	(Formula at next page.)
Gradually add the water to the Confection of Almond while	Add the water gradually to the Confection, triturating con-	

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN.
triturating, until they are mixed; then strain through linen.	stantly; and then strain through linen or calico. Or, Sweet Almonds - 1oz. and ʒii. Pure Sugar - - - - ʒv. Mucilage - - - - fl. ½oz. Water - - - - - 2 pints. Steep the Almonds in hot water and peel them; and proceed as for the Mistura Acaciæ.	AVOIRDUPOIS WEIGHT. Sweet Almonds - - - ʒv. Refined Sugar - - - ʒii. Gum Arabic, in powder - ʒi. Distilled Water - - - 8oz. Steep the Almonds in hot water for five minutes, and having removed their external coat, beat them with the sugar and gum in a mortar, into a coarse powder; add the water gradually, and triturate so as to form a uniform mixture. Finally, strain through muslin.

When prepared with Confection made according to the London Pharmacopœia, a good emulsion is quickly made, and the time in preparation greatly accellerated.

Useful vehicle for alkalies & their carbs, nitre, mag. sulph. & for syrups, Ipecac. & antimon. Tart. et Potass.

MISTURA CAMPHORÆ.

LONDON.	EDINBURGH.	DUBLIN.
Camphor - - - - - ʒss. Rectified Spirit 10 minims. Distilled Water - - 1 pint. First rub the Camphor with the Spirit, then with the water gradually poured in, and strain through linen.	Camphor - - - - - ℈i. Sweet Almonds, Pure Sugar - - of each ½oz. Water - - - - - 1 pint. Steep the Almonds in hot water and peel them; rub the Camphor and sugar well together in a mortar; add the Almonds; beat the whole into a smooth pulp; add the water gradually, with constant stirring, and then strain.	Tincture of Camphor - 1 fl. oz. Water - - - - - 3 pints. Shake the Tincture and water together in a bottle, and, after the mixture has stood for 24 hours, filter through paper.

The Edin. form differs widely from the other two.

Useful for cordial tinctures, in Typhus low states & affections of the urinary organs.

MISTURA CAMPHORÆ CUM MAGNESIA.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Camphor - - - 10 grains. Carbonate of Magnesia 25 grains. Water - - - - - 6 fl. oz. Triturate the Camphor and Carbonate of Magnesia together, adding the water gradually.	Not in Pharm.

It is said the Magnesia enables the water to dissolve the Camphor; when a more concentrated fluid form of Camphor is required, milk may be employed as a vehicle.

INCOMPATIBLES.—Acids, Earthy Salts.

MISTURA CREASOTI.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Creasote, Acetic Acid (85 per cent.) of each 16 minims. Compound Spirit of Juniper, Syrup, - - of each 1 fl. oz. Water - - - - 14 fl. oz. Mix the Creasote with the Acid, then gradually the water, and lastly, the Syrup and Spirit.	Not in Pharm.

A good way of administering Creasote, its unpleasant taste being concealed by the Juniper.

DOSE.—1 to 2 ounces.

In nausea, where fermentative state of stomach [illegible] exists

MISTURA CRETÆ.

Prepared Chalk - - - ½oz. Sugar - - - - - - - ʒiii. Mixture of Acacia - 1½ fl. oz. Cinnamon Water - 18 fl. oz. Mix.	Prepared Chalk - - - ʒx. Pure Sugar - - - - ʒv. Mucilage - - - - 3 fl. oz. Spirit of Cinnamon - 2 fl. oz. Water - - - - - - 2 pints. Triturate the Chalk, Sugar, and Mucilage together; and then add gradually the water and Spirit of Cinnamon.	Prepared Chalk - - - ʒii. Simple Syrup, Mucilage of Gum Arabic, of each ½ fl. oz. Cinnamon Water - 7 fl. oz. Rub the Chalk with the Cinnamon Water, then add the Syrup and Mucilage and mix.

DOSE.—1 to 2 ounces as an antacid in diarrhœa.

INCOMPATIBLES.—All acids and acid-salts.

REMARKS.—Care should be taken to employ the *prepared chalk* as directed, and not precipitated chalk, as the crystalline character of the latter is said to occasion irritation of the bowels.

Useful to combine with Opium, Kino, Catechu &c in Diarrhoea.

MISTURA FERRI AROMATICA.

Not in Pharm.	Not in Pharm.	Peruvian Bark (brown or pale) in powder - - - - 1oz. Columba Root, in coarse powder - - - - - - - ʒiii. Cloves, bruised - - - ʒii. Filings of Iron, separated by a Magnet - - - - ½oz. Digest for three days, with occassional agitation, in a covered vessel with as much Peppermint Water as will give 12oz. of a filtered product, and then add of Compound Tincture of Cardamoms, 3 fl. oz. Tincture of Orange Peel fl. ʒiii. This Mixture should be kept in a well-stopped bottle.

REMARK.—This is an unpopular preparation, although it is said to be an excellent tonic.

DOSE.—1 to 2 ounces.

MISTURA FERRI COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN. AVOIRDUPOIS WEIGHT.
Powdered Myrrh - - ʒii.	Myrrh, bruised - - - ʒii.	Myrrh, in powder - - ʒi.
Carbonate of Potash - - ʒi.	Carbonate of Potash - - ʒi.	Pure Carbonate of Potash ʒss.
Rose Water - - - 18 fl. oz.	Rose Water - - - 18 fl. oz.	Rose Water - - - 8 fl. oz.
Powdered Sulphate of Iron ℈iiss.	Sulphate of Iron, in coarse powder - - - - ℈iiss.	Sulphate of Iron - - ʒss.
Spirit of Nutmeg - 1 fl. oz.	Spirit of Nutmeg - 1 fl. oz.	Essence of Nutmeg - fl. ʒi.
Sugar - - - - - - - ʒii.	Pure Sugar - - - - ʒii.	Refined Sugar - - - ʒi.
Rub the Myrrh with the Spirit of Nutmeg and the Carbonate of Potash, and to these, while rubbing, add first the Rose Water with the Sugar, then the Sulphate. Put the mixture immediately in a glass vessel and stop it.	Triturate the Myrrh with the Spirit of Nutmeg and Carbonate of Potash, add the Rose Water and Sugar, with constant trituration, and then the Sulphate of Iron. Preserve the mixture in well-closed bottles.	Triturate the Myrrh and Carbonate of Potash with the Sugar, Spirit of Nutmeg, and 7oz. of the Rose Water, the latter being gradually added, until a uniform mixture is obtained; to this add the Sulphate of Iron, previously dissolved in the remaining ounce of Rose Water, and enclose the mixture at once in a bottle which should be tightly corked.

In practice it is found that by rubbing the Myrrh, first with part of the Rose Water, then adding the Spirit of Nutmeg, Sugar, and Carbonate of Potash, well triturating these together; then dissolve the Sulphate of Iron in the remaining Rose Water, and mix the two, immediately corking the bottle, makes the best mixture.

DOSE.—1 to 2 ounces, as a stimulating tonic; it has been long in great repute.

INCOMPATIBLES.—It is by far preferable to administer it without further admixture.

MISTURA GENTIANÆ COMPOSITA.

Compound Infusion of Gentian 12 fl. oz.	Not in Pharm.	Not in Pharm.
Compound Infusion of Senna 6 fl. oz.		
Compound Tincture of Cardamoms - - - - 2 fl. oz.		
Mix.		

DOSE.—1 to 2 ounces.

Since the above ingredients can be so easily prescribed, it is remarkable the College should retain it as an officinal preparation.

MISTURA GUAIACI.

Powdered Gum Guaiacum ʒiii.	Guaiac - - - - - ʒiii.	Not in Pharm.
Sugar - - - - - - ½oz.	Sugar - - - - - - ½oz.	
Powdered Gum Acacia - ʒii.	Mucilage - - - - ½ fl. oz.	
Cinnamon Water - - 1 pint.	Cinnamon Water - 19½ fl. oz.	
Rub the Sugar with the Guaiacum and Acacia, and to these, while rubbing, gradually add the Cinnamon Water.	Triturate the Guaiac with the Sugar, then with the Mucilage, and then add gradually the Cinnamon Water with constant trituration.	

DOSE.—Half an ounce to 2 ounces. Stimulant and diaphoretic.

useful in Chronic Rheumatism with a dry skin

MISTURA HORDEI.

LONDON.	EDINBURGH.	DUBLIN
Not in Pharm. *Vide* Decoctum Hordei Compositum, which much resembles the Edin. Mistura Hordei.	Pearl Barley, Figs, sliced, Raisins, freed from the seeds of each 2½oz. Liquorice Root, sliced and bruised - - - - - ʒ v. Water - - - - 5½ pints. Clean the Barley, if necessary, by washing it with cold water; boil it with 4½ pints of the water down to 2 pints; add the Figs, Raisins, and Liquorice Root, with the remaining pint of water, and again boil down to two pints, then strain.	AVOIRDUPOIS WEIGHT. Not in Pharm.

A demulcent drink given ad libitum.

MISTURA SCAMMONII.

LONDON.	EDINBURGH.	DUBLIN
Not in Pharm.	Resin of Scammony 7 grains. Unskimmed Milk - 3 fl. oz. Triturate the Resin with a little of the Milk, and gradually with the rest of it, till a uniform emulsion is formed.	Not in Pharm.

The above is the dose for an adult; half the dose for children. It is tasteless, and consequently well adapted for children.

MISTURA SPIRITUS VINI GALLICI.

LONDON.	EDINBURGH.	DUBLIN
Spirit of French Wine (Brandy) Cinnamon Water, each 4 fl. oz. The Yolks of 2 Eggs. Sugar - - - - - - - ½ oz. Oil of Cinnamon - 2 minims. Mix.	Not in Pharm.	Not in Pharm.

DOSE.—Half an ounce to 1½ ounce. Stimulant, restorative.

A delicious dose in cases of prostration, or last stages of fever.

MORPHIA.

LONDON.	EDINBURGH.	DUBLIN
Not in Pharm.	Not in Pharm.	For Process, (*Vide* Appendix.)

Very rarely given uncombined.

Used to prepare the Salts of Morphia.

MORPHIÆ ACETAS.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. A salt prepared from Opium. Crystals.	Take of Muriate of Morphia any quantity. Dissolve it in 14 times its weight of warm water, and when the solution is cool, add Aqua Ammoniæ gradually, and with constant agitation until there is a permanent but faint odour of Ammonia in the fluid. Collect the precipitate on a calico filter, wash it moderately with cold water and dissolve it by means of a slight excess of Pyroligneous Acid, in 12 parts of warm water for every part of Muriate of Morphia that was used. Concentrate the solution over the vapour-bath, and set it aside to crystallize. Drain and squeeze the crystals, and dry them with a gentle heat. More Acetate of Morphia may be obtained on concentrating the mother liquor.	AVOIRDUPOIS WEIGHT. Morphia, in fine powder - 1oz. Rectified Spirit - - 8 fl. oz. Acetic Acid of Commerce (Sp. Gr. 1·044), 4½ fluid drachms, or as much as is sufficient. Pour the Spirit on the Morphia, and, applying heat, gradually add the Acetic Acid until a neutral or slightly acid solution is obtained. Let this be evaporated to the consistence of Syrup, by a steam or water heat, and then set by for a few days, until it solidifies. In operations on the great scale, it will be worth while to remove the spirit by distillation.

DOSE.—One quarter to half a grain, in pill; given also in solution, which see.

INCOMPATIBLES.—Metallic Salts and astringent matters.

TEST.—Soluble in water and in Rectified Spirit; and when the spirit is distilled from the solution it yields crystals, which are totally destroyed by heat. (100 measures of a solution of 10 grains in half a fluid ounce of water, and 5 minims of Acetic Acid, heated near to 212°, and decomposed by a faint excess of Ammonia, yield by agitation a precipitate which in 24 hours occupies 15·5 measures of the liquid.—EDIN.) On the addition of Nitric Acid, it first becomes red, and then yellow; Tincture of Sesquichloride of Iron turns it a blue colour; if Chlorine recently prepared be added, and then Ammonia, a brown colour is produced, which disappears on the addition of more Chlorine. Morphia is precipitated by Solution of Potash, but if added in excess, the precipitate is re-dissolved.—LOND.

MORPHIÆ HYDROCHLORAS.

In the Mat. Med. A salt prepared from Opium. Crystals.	*Morphiæ Murias.* For Process, (*Vide* Appendix.)	*Morphiæ Murias.* For Process, (*Vide* Appendix.)

DOSE.—From one-fourth to half a grain, in pill; and in solution, which see.

TEST.—Snow-white; entirely soluble in Rectified Spirit and in water; solution colourless; loss of weight at 212° not above 13 per cent.; what is precipitated from the watery solution by Nitrate of Silver, is not perfectly dissolved either by Ammonia, unless added in excess, or by Hydrochloric or Nitric Acid, which distinguishes it from the Acetate. (100 measures of a solution of 10 grains in half a fluid ounce of water, heated near to 212°, and decomposed with agitation by a faint excess of Ammonia, yield a precipitate which in 24 hours occupies 12·5 measures of the liquid.—EDIN.) Its other characters correspond with those of Acetate of Morphia, above mentioned.—LOND.

MUCILAGO ACACIÆ.

Vide Mistura Acaciæ.

MUCILAGO AMYLI.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Decoctum Amyli.		
Starch - - - - - - ½oz. Water - - - - - 1 pint.	Starch - - - - - - ½oz. Water - - - - - 1 pint.	Starch - - - - - - ½oz. Water - - - - - ½ pint.
Rub the Starch with the water, gradually added, then boil for a short time.	Triturate the Starch with a little of the water; add the rest of the water gradually; then boil for a few minutes.	Triturate the Starch with the water, gradually added, then boil for a few minutes.

Dublin double the strength of the other two.

Used in the form of Enema, either alone or as a vehicle for other remedies.

MUCILAGO HORDEI.

LONDON.	EDINBURGH.	DUBLIN.
Vide Decoctum Hordei, which closely resembles Dublin Mucilago Hordei.	Not in Pharm.	Ground Pearl Barley - ½oz. Water - - - - - 16oz.
		Triturate the Barley with the water, gradually added, then boil for a few minutes.

MUCILAGO TRAGACANTHÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Tragacanth - - - - ʒii. Boiling Water - - 9 fl. oz.	Not in Pharm.
	Macerate for 24 hours, then triturate to dissolve the gum, and express through linen or calico.	

Used for suspending pulverulent matters in mixtures; it does not keep well, and powder of Tragacanth, rubbed down with a little syrup first, and afterwards with water, answers equally well. One part of Tragacanth gives more viscocity to water than 25 parts of Gum Arabic.

OLEUM ÆTHEREUM.

LONDON.	EDINBURGH.	DUBLIN.
Rectified Spirits - - 2 pints. Sulphuric Acid - - 36 fl. oz. Solution of Potash, Distilled Water, of each, 1 fl. oz. or q. s.	Not in Pharm.	Not in Pharm.
Mix the Acid cautiously with the Spirit. Let the solution distil until a black froth arises; then immediately remove the retort from the fire. Separate the lighter supernatant liquor, and expose it to the air for a day. Add it to the solution of Potash, first mixed with the water, and shake all together. Lastly, when sufficiently washed, separate the Ætherial Oil which subsides.		

Only employed as an ingredient in Sp. Ether. Sulph. Compositus.

Specific gravity 1·05. Dropped into water it sinks immediately, the form of the globule being preserved. It is soluble in Æther, and does not change the colour of litmus to red.

OLEUM COPAIBÆ.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. (No process given.)	Copaiva - - - - - 1oz. Water - - - - - 1½ pint. Distil, preserving the water; when most of the water has passed over, heat it, return it into the still and resume the distillation; repeat this process so long as a sensible quantity of oil passes over with the water.	AVOIRDUPOIS WEIGHT. Not in Pharm.

OLEUM TEREBINTHINÆ PURIFICATUM.

In the Mat. Med. Oil distilled from Turpentine, rectified.	Oil of Turpentine - - 1 pint. Water - - - - - 4 pints. Distil as long as Oil comes over with the water.	Not in Pharm.

The Edin. directions are the same as Ph. Lond., 1836.

DOSE.—As an Anthelmintic from half a fluid ounce to 2 fluid ounces: for children 1 drachm to half an ounce. It forms an emulsion with yolk of egg (one to each fluid ounce,) and also with mucilage (of which equal portions are required.

OXYMEL.

Honey - - - - - - 5 lb. Acetic Acid - - - - 7 fl. oz. (30·8 per cent.) Distilled Water - - 8 fl. oz. Mix the Acid, diluted with the water, to the honey made hot.	Not in Pharm.	Clarified Honey, by weight 1 lb. Acetic Acid of Commerce (Sp. Gr. 1·044—28 *per cent.*) 3 fl. oz. Mix the Acid with the Honey previously heated.

The London has materially reduced the strength of the acid in this preparation. The Dublin is nearly three times the strength—in fact, of the same strength as the Ph. L. 1836 was.

DOSE.—2 drachms to half an ounce in cough mixtures, or as an adjunct to gargles.

OXYMEL SCILLÆ.

Vinegar of Squills - 2½ pints. Honey - - - - - - 5 lb. Evaporate the Vinegar over a slow fire down to 12 fluid ounces, and mix with the honey made hot.	Not in Pharm.	Not in Pharm.

DOSE.—Half a drachm to 2 drachms. Expectorant in chronic coughs.

The evaporation of the Acetum Scillæ should be conducted with great care, lest the bitter principle of the Squill be injured; perhaps a stronger Acetum Scillæ *without heat* would be preferable. The other two Colleges have Syrupus Scillæ.

PILULÆ ALOES.

Not in Pharm.	Socotorine Aloes and Castile Soap, equal parts. Conserve of Roses, a sufficiency. Beat them into a proper pill mass. This pill may be also correctly made with the finer qualities of East India Aloes, as the Socotorine variety is very scarce; and many, not without reason, prefer the stronger Barbadoes Aloes.	Not in Pharm.

It is clear that in Pil. Aloës the *Socotorine* should be used, unless the other kinds are especially ordered.

DOSE.—10 to 20 grains.

PILULA ALOES COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Powdered Socotorine Aloes 1oz. Extract of Gentian - - ½oz. Oil of Carraway - 40 minims. Treacle, as much as may be sufficient.	Not in Pharm.	Hepatic Aloes, in powder 2oz. Extract of Gentian - - 1oz. Oil of Carraway - - fl. ʒ i. Treacle by weight - - 1oz.
Beat them together that they may be intimately mixed into a mass proper for making pills.		Beat them together until they are thoroughly incorporated.

DOSE.—5 to 15 grains, as a purgative.

PILULA ALOES CUM MYRRHA.

Powdered Socotorine, or Hepatic Aloes - - - ½ oz. Saffron, Myrrh, powdered, Soft Soap - - of each ʒ ii. Treacle, as much as may be sufficient.	Aloes (Socotorine or East Indian) 4 parts. Myrrh - - - - - 2 parts. Saffron - - - - - 1 part.	Hepatic Aloes, in powder 2oz. Myrrh, in powder - - 1oz. Dried Saffron, in powder ½oz. Treacle, by weight - - 2½oz.
Beat them together that a mass may be formed.	Beat them into a proper mass with a sufficient quantity of Conserve of Red Roses.	Triturate the Aloes, Myrrh, and Saffron together, and sift them; then add the Treacle, and beat all the ingredients into a uniform mass.

Bedford uses as Rufus's Pill. **DOSE.**—10 to 20 grains. A stimulant and cathartic. Emmenagogue.

The Soft Soap mentioned in the Mat. Med. must of course be used for the London Pill Mass.

PILULA ALOES CUM SAPONE.

Powdered Extract of Barbadoes Aloes, Soft Soap, Extract of Liquorice, equal parts. Treacle, as much as may be necessary.	Not in Pharm.	Not in Pharm.
Beat the Extract of Aloes with the Soap, then the remaining ingredients being added, beat all together, that a mass may be formed.		

This is similar to the Pil. Aloes Diluta which originated with Dr. Marshall Hall, and is often prescribed in London.

DOSE.—4 to 8 grains.

PILULA ALOES ET ASSAFŒTIDA.

Not in Pharm.	Aloes (Socotorine or East Indian), Assafœtida, and Castile Soap - - equal parts.	Not in Pharm.
	Beat them with Conserve of Red Roses into a pill mass.	

DOSE.—10 to 15 grains. Cathartic and Antispasmodic.

PILULA ALOES ET FERRI.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Sulphate of Iron - 3 parts. Barbadoes Aloes - 2 parts. Aromatic Powder - 6 parts. Conserve of Red Roses 8 parts. Pulverize the Aloes and Sulphate of Iron separately; mix the whole ingredients, and beat them into a proper mass which is to be divided into five grain pills.	Not in Pharm.

DOSE.—10 to 15 grains.

PILULÆ ASSAFŒTIDÆ.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		Pilulæ Assafœtidæ Comp.
Not in Pharm.	Assafœtida, Galbanum, and Myrrh - - of each, 3 parts. Conserve of Red Roses, 4 parts, or a sufficiency. Mix them and beat them into a proper pill mass.	Assafœtida - - - - 2oz. Galbanum, Myrrh, and Treacle, - - - of each 1oz. Heat all the ingredients in a capsule, by means of a steam or water bath, and stir the mass until it assumes a uniform consistence.

DOSE.—10 to 20 grains.

PILULA CALOMELANOS COMPOSITA.

Vide Pil. Hydrargyri Chloridi Comp.

PILULA CALOMELANOS ET OPII.

Vide Vide Pil. Hydrargyri Chloridi et Opii.

PILULA CAMBOGIÆ COMPOSITA.

LONDON.	**EDINBURGH.**	**DUBLIN.**
	Pilulæ Cambogiæ.	Not in Pharm.
Powdered Gamboge - ʒii. Powdered Socotorine, or Hepatic Aloes - - - ʒiii. Powdered Ginger - - ʒi. Soft Soap - - - - - ½oz. Mix the Powders, then, the Soap being added, beat all together, that a mass may be formed.	Gamboge, East Indian, or Barbadoes Aloes, Aromatic Powder, of each 1 part. Castile Soap - - - 2 parts. Pulverize the Gamboge and Aloes separately, mix all the powders, add the Soap, and then a sufficiency of Syrup, beat the whole into a proper pill mass.	

London half the strength of Edinburgh.

Remarks.—To remedy the irritation which small particles of powdered Gamboge are sometimes said to produce on the linings of the bowels, the Gamboge and Aloes may be first dissolved in Proof Spirit, and then blended with the Ginger and Soap, afterwards evaporated to pill mass consistence. Experiment proves that a good mass may be so made.

DOSE.—10 to 20 grains.—Lond. Cathartic.

PILULA COLOCYNTHIDIS COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
	Pilulæ Colocynthidis.	AVOIRDUPOIS WEIGHT.
Extract of Colocynth - ʒ i.	Colocynth - - - 4 parts.	Pulp of Colocynth, in fine powder - - - - - 1oz.
Powdered Extract of Aloes ʒ vi.	Socotorine, or East Indian Aloes,	Hepatic Aloes, in fine powder, 2oz.
Powdered Scammony - ʒ ii.	Scammony, - of each 8 parts.	Scammony, in fine powder 1oz.
Powdered Cardamoms ʒ ss.	Sulphate of Potash,	Oil of Cloves - - - fl. ʒ i.
Soft Soap - - - - ʒ iss.	Oil of Cloves, - of each 1 part.	Castile Soap - - - - 1oz.
	Rectified Spirit, a sufficiency.	Treacle, by weight - - ʒ x.
Mix the powders, then, the remaining ingredients being added, beat all together, that a mass may be formed.	Pulverize the Aloes, Scammony, and Sulphate of Potash together; mix with them the Colocynth, previously reduced to fine powder; add the Oil of Cloves, and, with the aid of a small quantity of rectified Spirit, beat the whole into a proper pill mass, which is to be divided into 5 grain pills.	Reduce the Soap to a fine powder, and mix it with the Colocynth, Aloes, and Scammony; then rub all together with the Oil of Cloves and Treacle, and beat them into a mass of a uniform consistence.

The London College has discontinued the Compound Extract of Colocynth, and substituted for it this pill, putting 1 drachm of Extract in the place of 3 drachms of Pulp of Colocynth, which is a fair equivalent when Proof Spirit is employed to extract it. (*Vide* note on Ext. Colocynthidis). The ingredients, however, are not so intimately blended as they were in the old process for the Compound Extract.

The Edin. contains twice as much Scammony as the Dublin.

DOSE of London, 5 grains; Edin. 6 grains; Dublin, 8 grains.

PILULÆ COLOCYNTHIDIS ET HYOSCYAMI.

Not in Pharm.	Colocynth Pill Mass - 2 parts.	Not in Pharm.
	Extract of Hyoscyamus 1 part.	
	Beat them well together, adding a few drops of rectified Spirit, if necessary, and divide the mass into 5 grain pills.	

PILULA CONII COMPOSITA.

Extract of Hemlock - ʒ v.	Not in Pharm.	Not in Pharm.
Powdered Ipecacuanha - ʒ i.		
Treacle, as much as may be sufficient.		
Beat together, that a mass may be formed.		

The College has substituted Treacle for Mucilage.

DOSE.—5 grains. Antispasmodic. Useful in Hooping Cough and Phthisis.

PILULÆ CUPRI AMMONIATI.

Not in Pharm.	Ammoniated Copper, in fine powder - - - - 1 part.	Not in Pharm.
	Bread-crumb - - - 6 parts.	
	Solution of Carbonate of Ammonia, a sufficiency.	
	Beat them into a proper mass, and divide it into pills, containing each a half grain of Ammoniated Copper.	

DOSE.—1 pill, increased gradually to 8.

PILULÆ DIGITALIS ET SCILLÆ.

		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Digitalis, Squill, - - of each 1 part. Aromatic Electuary - 2 parts. Beat them into a proper mass with Conserve of Red Roses, and divide the mass into 4 grain pills.	Not in Pharm.

DOSE.—1 pill every 5 or 6 hours, as a diuretic.

PILULÆ FERRI CARBONATIS.

Not in Pharm.	Saccharine Carbonate of Iron, 4 parts. Conserve of Red Roses 1 part. Beat them into a proper mass, to be divided into 5 grain pills.	Not in Pharm.

DOSE.—1 to 4 pills. As a tonic for delicate females and children.

PILULA FERRI COMPOSITA.

Powdered Myrrh - - ʒii. Carbonate of Soda, Sulphate of Iron, Treacle, - - - of each ʒi. Rub the Myrrh with the Carbonate in a vessel first made warm, then the Sulphate being added, rub them again; lastly, beat all together that a mass may be formed.	Not in Pharm.	Not in Pharm.

The active ingredient of this pill is the Protocarbonate of Iron, resulting from the decomposition of the Protosulphate by the Carbonate of Soda.

DOSE.—10 to 20 grains as a tonic.

PILULÆ FERRI SULPHATIS.

Not in Pharm.	Dried Sulphate of Iron 2 parts. Extract of Taraxacum 5 parts. Conserve of Red Roses 2 parts. Liquorice Root Powder 3 parts. Beat them together into a proper mass, which is to be divided into 5 grain pills.	Not in Pharm.

Each pill contains nearly 1 grain of dried Sulphate of Iron.

DOSE.—1 to 3 pills—as a tonic.

PILULA GALBANI COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN
Prepared Galbanum - ʒ ii. Myrrh, Prepared Sagapenum, of each ʒ iii. Prepared Assafœtida - ʒ i. Soft Soap - - - - - ʒii. Treacle, as much as may be necessary. Beat all together that a mass may be formed.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.

The Soft Soap now introduced into this pill prevents the mass from getting too hard.

DOSE.—5 to 15 grains. Antispasmodic, emmenagogue.

PILULA HYDRARGYRI.

Mercury - - - - - ½oz. Confection of Roses - ʒ vi. Powder of Liquorice - ʒ ii. Rub the Mercury with the Confection until globules can no longer be seen; then, the Liquorice being added, beat the whole together, that a mass may be formed.	Mercury - - - - 2 parts. Conserve of Red Roses 3 parts. Liquorice Root, in powder 1 part. Beat the Mercury and Conserve into a uniform mass till globules of Mercury can no longer be detected, then add the Liquorice Root, and beat the whole again into a proper mass, which is to be divided into 5 grain pills.	Pure Mercury - - - 2oz. Confection of Roses - 3oz. Liquorice Root, in fine powder 1oz. Rub the Mercury with the Confection, until the metallic globules are no longer visible, then add the Liquorice powder, and mix the whole well together.

The Mercury in this preparation is most probably in minute division only.

DOSE.—4 to 6 grains as an alterative; 10 to 20 grains as a purgative; is frequently combined with some Cathartic Pill Mass.

PILULA HYDRARGYRI CHLORIDI COMPOSITA.

	Pilulæ Calomelanos Compositæ.	*Pilulæ Calomelanos Compositæ.*
Chloride of Mercury (Calomel), Oxysulphuret of Antimony, of each ʒii. Guaiacum, powdered, Treacle - - - of each ½oz. Rub the Chloride with the Oxysulphuret, then with the Guaiacum and Treacle, that a mass may be formed.	Calomel, and Golden Sulphuret of Antimony, of each, 1 part. Guaiac, in fine powder, and Treacle - - of each, 2 parts. Mix the solids in fine powder, then the Treacle, and beat the whole into a proper pill mass; to be divided into 6 grain pills.	Calomel, Precipitated Sulphuret of Antimony, - - of each ʒ i. Guaicum Resin, in powder ʒ ii. Castor Oil - - - - fl. ʒ i. Triturate the Calomel with the Antimony, then add the Resin and Oil, and beat the whole into a uniform mass.

Plummer's Pill. 1 grain of Calomel is contained in 6 grains of London and Edinburgh, and in 5 grains of Dublin.

DOSE.—5 to 10 grains, as an alterative in cutaneous eruptions.

PILULA HYDRARGYRI COMPOSITA ET OPII.

Not in Pharm.	Calomel - - - - 3 parts. Opium - - - - - 1 part. Conserve of Red Roses, a sufficiency. Beat them into a proper mass, which is to be divided into pills, each containing two grains of Calomel.	Not in Pharm.

LONDON.	EDINBURGH.	DUBLIN.

PILULÆ IPECACUANHÆ ET OPII.

Not in Pharm.	Powder of Ipecacuan and Opium - - - - 3 parts. Conserve of Red Roses 1 part. Beat them into a proper mass which is to be divided into 4 grain pills.	AVOIRDUPOIS WEIGHT. Not in Pharm.

As there is no formula for " Powder of Ipecacuan and Opium," it is to be supposed that Pulvis Ipecacuanhæ Compositus is here intended.

PILULA IPECACUANHÆ CUM SCILLA.

Compound powder of Ipecacuanha - - - - - ʒ iii. Squill, freshly powdered, Ammoniacum, powdered of each, ʒ i. Treacle as much as may be necessary. Beat all together, that a mass may be formed.	Not in Pharm.	Not in Pharm.

DOSE.—5 grains three times a day, or 10 grains at night, as a stimulating expectorant and sudorific.

PILULÆ OPII SIVE THEBAICÆ.

Not in Pharm. Pilula Saponis Composita, is the same strength.	Opium - - - - - 1 part. Sulphate of Potass - 3 parts. Conserve of Red Roses 1 part. Beat them into a proper mass, which is to be divided into 5 grain pills. It is to be observed that this pill contains twice as much Opium as the opiate pill of the last Latin edition of this Pharmacopœia.	Not in Pharm. Pilula Saponis Composita, is the same strength.

One grain of Opium is contained in each 5 grain pill.

DOSE.—1 to 2 pills. Anodyne, narcotic.

PILULÆ PLUMBI OPIATÆ.

Not in Pharm.	Acetate of Lead - - 6 parts. Opium - - - - - 1 part. Conserve of Red Roses, about 1 part. Beat them into a proper mass, which is to be divided into 4 grain pills. This pill may be made also with twice the quantity of Opium.	Not in Pharm.

Each pill contains 3 grains of Acetate of Lead, and half a grain of Opium, unless *twice* the quantity be ordered.

DOSE.—1 or two pills twice or thrice a day.

PILULÆ RHEI.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Rhubarb, in fine powder, 9 parts. Acetate of Potash - 1 part. Conserve of Red Roses 5 parts. Beat them into a proper mass, and divide it into 5 grain pills.	AVOIRDUPOIS WEIGHT. Not in Pharm.

PILULA RHEI COMPOSITA.

Rhubarb, powdered - ʒiv. Socotorine Aloes, powdered, ʒiii. Myrrh, powdered - - ʒii. Soft Soap - - - - ʒss. Oil of Caraway - 15 minims. Treacle, as much as may be necessary. Mix the powders together, then the remaining ingredients being added, beat all together that a mass may be formed.	Rhubarb, in fine powder, 12 parts. Aloes, in fine powder, 9 parts. Myrrh, and Castile Soap - of each 6 parts. Oil of Peppermint - 1 part. Conserve of Red Roses 5 parts. Mix them and beat them into a proper mass, and divide it into 5 grain pills. This pill may be also made without Oil of Peppermint, when so preferred.	Rhubarb, in fine powder 1½oz. Hepatic Aloes, in fine powder, ʒix. Myrrh, in fine powder, Castile Soap - of each ʒvi. Oil of Peppermint - fl. ʒi. Treacle, by weight - - 2oz. Reduce the Soap to a fine powder, and triturate it with the Rhubarb, Aloes, and Myrrh; then add the Treacle and Oil of Peppermint, and beat the whole into a uniform mass.

London and Edinburgh about the same strength; Dublin rather weaker. London contains Oil of Caraway, and the others Oil of Peppermint.

DOSE.—5 to 15 grains, as a laxative. It is a favorite dinner pill.

PILULÆ RHEI ET FERRI.

Not in Pharm.	Dried Sulphate of Iron 4 parts. Extract of Rhubarb 10 parts. Conserve of Red Roses 5 parts. Beat them into a proper pill mass, and divide it into 5 grain pills.	Not in Pharm.

PILULA SAPONIS COMPOSITA.

Powdered Opium, Powdered Liquorice, of each, ʒii. Soft Soap - - - - ʒvi. Beat all together that a mass may be formed.	Not in Pharm. A corresponding pill called Pil. Opii.	Opium, in fine powder - ½oz. Distilled Water fl. ʒss. or q. s. Castile Soap - - - - 2oz. Reduce the Soap to a powder, add the Opium and water, and beat the mixture into a mass of a uniform consistence.

5 grains contain 1 grain of Opium.

DOSE.—3 to 10 grains. Anodyne, narcotic.

LONDON. **EDINBURGH.** **DUBLIN.**

PILULA SCILLÆ COMPOSITA.

	Pilulæ Scillæ.	AVOIRDUPOIS WEIGHT.
Freshly powdered Squill ʒ i.	Squill, in fine powder 5 parts	Squill, in fine powder - ʒ iiss.
Ginger, powdered,	Ginger, in fine powder,	Ginger, in fine powder,
Ammoniacum, powdered, of each ʒ ii.	Ammoniac,	Ammoniac, in fine powder,
Soft Soap - - - - ʒ iii.	Spanish Soap, of each 4 parts.	Castile Soap, - of each ʒ ii.
Treacle - - - - - - ʒ i.	Conserve of Red Roses 2 parts.	Treacle, by weight - - ½oz.
Mix the powders together, then the remaining ingredients being added, beat all together that a mass may be formed.	Mix the powders, add the other articles, beat them into a uniform mass, and divide it into 5 grain pills.	Reduce the Soap to powder, and triturate it with the Squill, Ginger, and Ammoniac; then add the Treacle and beat them all into a mass of a uniform consistence.

London contains only half the quantity of Squills, compared with Edinburgh and Dublin; the two latter are much alike.

DOSE.—5 to 15 grains, in chronic catarrh and asthma.

PILULA STYRACIS COMPOSITA.

	Pilulæ Styracis.	Not in Pharm.
Prepared Storax - - ʒ vi.	Extract of Storax - 2 parts.	
Powdered Opium,	Opium,	
Saffron - - - of each ʒ ii.	Saffron, - - of each 1 part.	
Beat together, that a mass may be formed.	Beat them into a uniform mass, which is to be divided into 4 grain pills.	

One grain of Opium is contained in 5 grains of London, and 4 grains of Edinburgh. The Storax and Saffron completely conceal the odour and taste of the Opium, and the name enables practitioners to prescribe Opium without the knowledge of the patient.

DOSE.—4 or 5 grains.

PLUMBI ACETAS.

In the Mat. Med. Crystals. No process given.	Pyroligneous Acid - 2 pints. (Sp. Gr. 1·034.) Distilled Water - - 1 pint. Litharge - - - - - 14oz. Mix the Acid and water, add the Litharge, dissolve it with the aid of a gentle heat, filter, concentrate the solution sufficiently for crystallization on cooling.	In the Mat. Med. No process given.

DOSE.—2 to 8 grains, in the form of pill.

Dr. Christison states, that he has given 6 grains daily for several months in phthisis, without any palsy, colic, or dyspepsia being induced.

Mr. Webber of Norwich informs me, that in severe cases of bronchitis he gives from 3 to 10 grains of the Acetate of Lead in pill, *with a mixture containing three drachm doses* of Distilled Vinegar every four hours, till symptoms subside, which frequently takes place after the third or fourth dose.

INCOMPATIBLES.—Hard Water, the Mineral Acids and their Salts, Citric, Tartaric, and Carbonic Acids, and their Salts, the Alkalies, Lime Water, Iodides of Potassium and Iron, Tincture of Galls, Opium, Albuminous Liquids, and various Vegetable Infusions.

TEST.—Soluble in water. A white precipitate is thrown down from this solution by Carbonate of Soda, a yellow one by Iodide of Potassium, and the Solution is blackened by Hydrosulphuric Acid; Sulphuric Acid added to it evolves acetic vapours. If 100 grains be dissolved in water, and Sulphate of Soda be added, 80 grains of Sulphate of Lead are precipitated.—LOND. Entirely soluble in water, acidulated with Acetic Acid. 48 grains thus dissolved are not entirely precipitated by a solution of 30 grains of Phosphate of Soda.—EDIN.

PLUMBI DIACETATIS SOLUTIO.

Vide Liquor Plumbi Diacetatis.

PLUMBI IODIDUM.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Acetate of Lead - - - 8oz.	Nitrate of Lead,	Nitrate of Lead,
Iodide of Potassium - 7oz.	Iodide of Potassium, of each 1oz.	Iodide of Potassium, of each, 1oz.
Distilled Water - 1 gallon.	Water - - - - - 1½ pint.	Distilled Water - - 2 pints.
Dissolve the Acetate in 6 pints of water, and strain; and to these add the Iodide, first dissolved in 2 pints of water. What is precipitated wash with cold distilled water, and dry. Let it be kept from access of light.	Dissolve the salts separately, each in one-half of the water, add the solutions; collect the precipitate on a filter of linen or calico, and wash it with water. Boil the powder in 3 gallons of water acidulated with 3 fluid oz. of Pyroligneous Acid. Let any undissolved matter subside, maintaining the temperature near the boiling point, and pour off the clear liquor, from which the Iodide of Lead will crystallize on cooling.	Dissolve, with the aid of heat, the Nitrate of Lead in 1 pint, and the Iodide of Potassium in a ½ pint of water, and mix the two solutions when cold. Decant the clear solution when the precipitate has subsided, and having transferred the latter to a filter, wash it with the remainder of the water. Finally, dry the product at a temperature not exceeding 212°, and preserve it in a close bottle.

It is better to add the Solution of Acetate of Lead cautiously to the Solution of Iodide of Potassium in the London process, because an excess of Acetate of Lead occasions an oxiodide of lead to be formed. For the preparation of ointment, the pulverulent Iodide is to be preferred to the crystalline or scaly kind.

ADMINISTRATION.—Seldom given internally; when prescribed, the dose is from 3 to 5 grains, made into pills with Conserve of Roses or Extract of Liquorice.

TEST.—Bright yellow powder; 5 grains are entirely soluble, with the aid of ebullition, in 1 fluid drachm of Pyroligneous Acid diluted with 1½ fluid ounce of Distilled Water, and golden coloured crystals are abundantly deposited on cooling.—EDIN. Also soluble in boiling water, depositing scales on cooling. It melts by heat, and for the most part is dissipated, first in yellow, then in violet coloured vapours. If Sulphate of Soda be added to 100 grains of the Iodide of Lead dissolved in Nitric Acid, diluted with twice its weight of boiling water, after the Iodine has been expelled, 66 grains of Sulphate of Lead are thrown down.—LOND.

PLUMBI NITRAS.

Not in Pharm.	Litharge - - - - - 4½oz. Dilute Nitric Acid - 1 pint.	Litharge, in fine powder - 5oz. Pure Nitric Acid - - 2 fl. oz. Distilled Water - - 3 pints. Dilute Nitric Acid - - q. s.
	Dissolve the Litharge to saturation with the aid of a gentle heat; filter and set the liquid aside to crystallize. Concentrate the residual liquid to obtain more crystals.	To the Litharge, placed in a porcelain dish, add the Acid with a pint and a half of the water, and applying a sand heat, and occasionally stirring the mixture, evaporate the whole to dryness. Upon the residue boil the remainder of the water, clear the solution by filtration, and having acidulated it by the addition of a few drops of the dilute Nitric Acid, evaporate it until a pellicle begins to form on its surface. The heat being now withdrawn, crystals will form, on the cooling of the solution, which should be dried on blotting paper in a warm atmosphere, and preserved in a close bottle.

USE.—Nitrate of Lead is seldom administered internally; it is used by the Edinburgh and Dublin Colleges in the preparation of Iodide of Lead; sometimes employed as a topical agent in the treatment of cancerous and cutaneous diseases.

POTASSÆ HYDRAS.

LONDON.	EDINBURGH.	DUBLIN.
	Potassa.	AVOIRDUPOIS WEIGHT. *Potassa Caustica.*
Solution of Potash - 1 gallon.	Aqua Potassæ, any convenient quantity.	Solution of Caustic Potash, any convenient quantity.
Evaporate the solution in a clean iron vessel over the fire until, the ebullition being finished, the Hydrate of Potash liquefies. Pour this into proper moulds.	Evaporate it in a clean and covered iron vessel, increasing gradually the heat, till an oily-looking fluid remains, a drop of which, when removed on a rod, becomes hard on cooling. Then pour out the liquid upon a bright iron plate, and as soon as it solidifies, break it quickly and put it into glass bottles secured with glass stoppers.	Boil it in a silver or bright iron vessel, until its water has been evaporated away, and then raise the temperature until ebullition ceases, and a liquid is obtained which flows like oil. Pour this out upon a silver or iron dish, and, the moment it has set, break it into fragments, and enclose these in a green glass bottle furnished with an air-tight stopper.

USE.—Hydrate of Potash is exclusively employed as an escharotic.

TEST.—In an open vessel it speedily liquefies. It is soluble in Rectified Spirit.—LOND. Boiling water commonly leaves Oxide of Iron undissolved, which should not exceed 1·25 per cent; the solution, supersaturated with Nitric Acid, gives a faint precipitate with Solution of Nitrate of Baryta (Sulphate), and more with Solution of Nitrate of Silver (Chloride), owing to the presence of impurities.—EDIN. As found in the shops, it generally contains Peroxide of Potassium, therefore a stick of it placed in a tube full of water, and inverted, will evolve Oxygen.

POTASSA CUM CALCE.

Hydrate of Potash,	Aqua Potassæ, any convenient quantity.	Caustic Potash,
Lime - - - - of each 1oz.		Fresh-burned Lime, of each 1oz.
Rub them together, and keep them in a well-closed vessel.	Evaporate it in a clean covered iron vessel to one-third of its volume; add slaked Lime till the fluid has the consistence of firm pulp; preserve the product in carefully covered vessels.	Rub them both rapidly to powder in a warm mortar, and introduce the mixture, with as little delay as possible, into a bottle furnished with an air-tight stopper.

USE.—By admixture with Lime, Hydrate of Potash is rendered less deliquescent. Potassa cum Calce is employed as an escharotic in the same cases as Potassa Hydras; it should be made into a paste with Rectified Spirit before it is used. It is, however, now used extensively in the form of sticks, as recommended by Dr. H. Bennett.

REMARKS.—Mixed with water it is slaked, and any acid being added, it evolves no bubbles of Carbonic Acid, shewing the absence of *Carbonates* of Potash and Lime.—LOND.

POTASSÆ ACETAS.

Acetic Acid - - - 26 fl. oz. (30·8 per cent.)	Pyroligneous Acid - 1½ pint. (21 per cent.)	Acetic Acid of Commerce, Sp. Gr. 1·044 (28 per cent.) 2 pints.
Carbonate of Potash 1 lb. or q.s.	Carbonate of Potash (dry) 7oz. or q.s.	Pure Carbonate of Potash 1 lb.
Distilled Water - - 12 fl. oz.		
To the Acid, first mixed with the water, add the Carbonate gradually to saturation, then strain. Evaporate the liquor	Add the Carbonate gradually to the Acid till complete neutralization is accomplished. Evaporate the so-	To the Acid, placed in a porcelain capsule, gradually add the Carbonate of Potash, and when effervescence has

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
in a sand-bath, the heat being cautiously applied, until the salt be dried.	lution over the vapour-bath, till it is so concentrated as to form a concrete mass when cold. Allow it to cool and crystallize in a solid cake; which must be broken up and immediately put into well-closed bottles.	ceased, boil for a couple of minutes. Add now, if necessary, a few drops of the same Acetic Acid, so that the solution may have a slightly acid reaction, and having evaporated to dryness, melt the residue by the cautious application of heat in a clean pot of cast-iron. The liquefied salt is now to be removed from the fire, and when, upon cooling, it has solidified, it should be quickly broken into fragments of a suitable size, and enclosed in a bottle furnished with an air-tight stopper.

It is soluble in water and in Rectified Spirit. This solution neither affects litmus nor turmeric; nothing is precipitated from it either on the addition of Chloride of Barium or Nitrate of Silver; but if from a stronger solution anything is thrown down by Nitrate of Silver, the same is again dissolved on water or dilute Nitric Acid being added. Sulphuric Acid added, evolves acetic vapours. When 100 grains of this salt, digested in Sulphuric Acid, is evaporated, and the salt dried by a high temperature, 88·8 grains of Sulphate of Potash remain.—LOND.

POTASSÆ BICARBONAS.

In the Mat. Med. Crystals.	For the process, (*Vide* Appendix.)	For the process, (*Vide* Appendix.)

TEST.—Soluble in water. The solution slightly changes the colour of turmeric to brown. Sulphate of Magnesia throws nothing down from this solution unless it be heated. The addition of Nitric Acid causes the evolution of bubbles; and the same acid being first added in excess, Chloride of Barium throws nothing down, and Nitrate of Silver very little, if anything. From 100 grains, 30·7 grains of water and Carbonic Acid are expelled at a red heat.—LOND. A solution in 40 parts of water does not give a brick-red precipitate with solution of Corrosive Sublimate, shewing the absence of Carbonate of Potash.—EDIN.

POTASSÆ BISULPHAS.

Not in Pharm.	Take of the residuum in the preparation of Pure Nitric Acid - - - - - 2 lb. Sulphuric Acid (Commercial) 7 fl. oz. and fl. ʒ i. Boiling Water - - 6 pints.	Sulphate of Potash, in powder 3oz. Pure Sulphuric Acid - 1 fl. oz.
	Dissolve the Salt in the water, add the Acid, concentrate the solution, and set it aside to cool and form crystals.	Place the Acid and Salt in a small porcelain capsule, and to this apply a heat capable of liquefying its contents, and which should be continued until acid vapours cease to be given off. The Bisulphate, which concretes as it cools, should be reduced to a fine powder, and preserved in a well-stopped bottle.

A solution in 8 parts of water effervesces briskly with Alkaline Carbonates.—EDIN.

POTASSÆ CARBONAS.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
	Potassæ Carbonas Purum.	*Potassæ Carbonas Purum.*
In the Mat. Med.	Pure Carbonate of Potash, may be most readily obtained by heating crystallized Bicarbonate of Potash to redness in a crucible, but more cheaply by dissolving Bitartrate of Potash in 30 parts of boiling water, separating and washing the crystals which form on cooling, heating these in a loosely covered crucible to redness so long as fumes are discharged, breaking down the mass, and roasting it in an open crucible for two hours, with occasional stirring, lixiviating the product with distilled water, filtering the solution thus obtained, evaporating the solution to dryness, granulating the salt towards the close by brisk agitation, and heating the granular salt nearly to redness. The product of either process must be kept in well-closed bottles.	White Bitartrate of Potash 2 lb. Sesquicarbonate of Ammonia, ½oz. Distilled Water - - 3 pints. Place the Bitartrate of Potash in an iron pot or crucible, and constantly stirring it with an iron rod, expose it to a red heat until vapours cease to be evolved. Reduce the residuum to a coarse powder, and, having boiled it for 20 minutes with 1 quart of the water, filter through paper, washing the filter and its contents with the residual pint of water, in which the Sesquicarbonate of Ammonia has been first dissolved. The filtered solution is now to be evaporated to dryness, and, a low red heat being finally applied, the product is to be rapidly reduced to powder in a warm mortar, and enclosed in well-stopped bottles.

TEST.—Deliquesces in the air; is almost entirely soluble in water; it changes the colour of turmeric brown. When supersaturated by Nitric Acid, neither Carbonate of Soda nor Chloride of Barium throws anything down, and Nitrate of Silver but very little. 100 grains lose 16· grains of water at a high temperature, and the same quantity, added to dilute Sulphuric Acid, evolves 26·3 grains of Carbonic Acid. Let it be kept in a vessel well stoppered.—LOND. Does not lose weight at a low red heat.—EDIN.

POTASSÆ ET SODÆ TARTRAS.

Vide Sodæ Potassio-Tartras.

POTASSÆ NITRAS.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Crystals.	In the Mat. Med.	A process, (*Vide* Appendix.)

TEST.—Soluble in water. From this solution nothing is thrown down, either by Chloride of Barium or Nitrate of Silver; it fuses by heat, but loses nothing of its weight; at an intense heat it emits oxygen; from the remaining salt, rubbed to powder, Sulphuric Acid disengages nitrous vapours; placed on glowing Charcoal it deflagrates, Carbonate of Potash being left. From 100 grains, digested in Sulphuric Acid, 86 grains of Sulphate of Potash, dried at a red heat, are prepared.—LOND.

POTASSÆ SULPHAS.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Crystals.	The residuum of the preparation of Pure Nitric Acid 2 lb. Boiling Water - 2 gallons. White Marble, in powder, a sufficiency.	The residuum of the process of Acidum Nitricum Purum 1 lb. Water - - - - 2 quarts. Fresh Burned Lime - 6oz. Carbonate of Potash from Pearlash - - - - ℥i. Dilute Sulphuric Acid fl. ℥vi. or q. s.

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN.
	Dissolve the Salt in the water, add the marble gradually till effervescence ceases, and the solution is completely neutralized; filter the liquid, and evaporate it till a pellicle forms on its surface; then set it aside to cool and form crystals.	AVOIRDUPOIS WEIGHT. Slake the Lime in 4oz. of the water, and having dissolved the residuum of the Nitric Acid process in the remainder of the water, and raised the solution to the temperature of ebullition, gradually add to it the slaked Lime, until reddened litmus paper immersed in it is restored to a blue colour. Filter the solution through calico, and to it, raised to the boiling point, add the Carbonate of Potash, as long as there is any precipitate. Filter again, add the dilute Sulphuric Acid, so as to produce a neutral, or very slightly acid solution, and, having evaporated this till a film forms on its surface, set it by for 24 hours. The crystals which will then have formed should be dried on blotting-paper and preserved for use.

TEST.—Slightly soluble in water. That which is thrown down from this solution by Bichloride of Platinum is yellowish, and that by Chloride of Barium white, and insoluble in Nitric Acid; it decrepitates on the application of heat, fuses at a red heat, but loses nothing of its weight. From 100 grains, dissolved in Distilled Water, Chloride of Barium and Hydrochloric Acid being added, 132 grains of Sulphate of Baryta, dried at a red heat, are prepared.—LOND. Not subject to adulteration.—EDIN.

POTASSÆ SULPHAS CUM SULPHURE.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Nitrate of Potash, Sulphur, of each, equal parts. Mix them thoroughly; throw the mixture in small successive portions into a red-hot crucible; and when the deflagration is over, and the Salt has cooled, reduce it to powder, and preserve it in well-closed bottles.	Not in Pharm.

DOSE.—Half a drachm to a drachm, in dyspepsia and chronic skin diseases.

Its nature has not been carefully determined.

POTASSÆ TARTRAS.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. No Process given.	Bitartrate of Potash - 3 lb. Carbonate of Potash 16oz. or q. s. Boiling Water - - 6 pints. Dissolve the Carbonate in the water; add the Bitartrate till the liquor is neutralized;	White Bitartrate of Potash, in fine powder - 1 lb. or q. s. Carbonate of Potash from Pearl ash - - - - - 8oz. Distilled Water - ½ gallon. Dissolve the Carbonate of Potash in the water, and to the solution, while boiling hot,

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
	boil, and filter. Concentrate the liquor till a pellicle forms on its surface, and then set it aside to cool and crystallize. The residual liquor will yield more crystals by farther concentration and cooling.	gradually add the Bitartrate, until the liquid, after the ebullition has been continued for a couple of minutes, ceases to change the colour of blue or reddened Litmus. Filter through calico, and having evaporated the clear liquor until a pellicle forms on its surface, set it by to crystallize. After 12 hours pour off the liquid; and, having dried the crystals on bibulous paper, preserve them in a well-stopped bottle.

TEST.—Entirely and easily soluble in 4 parts of boiling water; solution neutral.—EDIN. The addition of almost any acid whatever, throws down crystals of Bitartrate of Potash, which generally adhere to the vessel. What is thrown down from the same solution by either Chloride of Barium or Acetate of Lead, is dissolved in dilute Nitric Acid, (if Sulphuric Acid is absent).—LOND. 44 grains in solution are not entirely precipitated by 55 grains of Nitrate of Lead.

POTASSII IODIDUM.

In the Mat. Med. Crystals. No process given.	For the process, (*Vide* Appendix.)	For the Process, (*Vide* Appendix.)

DOSE—3 to 15 grains, in rheumatism and secondary symptoms.

INCOMPATIBLES.—Acids, Acidulous and Metallic Salts.

TEST.—Soluble in 6 or 8 parts of Rectified Spirit, and freely in water. This aqueous solution does not, or only very slightly, change the colour of turmeric brown; it does not change the colour of litmus; Nitric Acid and Starch being added together, it becomes blue; it is not coloured by the addition of Tartaric Acid with Starch, (if Iodate of Potash is absent). What is thrown down from the same solution by Acetate of Lead is yellow, and is soluble in boiling water; but no precipitate occurs on adding either a solution of Lime or Chloride of Barium. Moreover, if the precipitate which occurs from the addition of Nitrate of Silver be digested in the stronger solution of Ammonia, and then Nitric Acid be added to the filtered liquor, nothing is thrown down from it, (showing the absence of Chlorides.) From 100 grains, dissolved in water, Nitrate of Silver will precipitate 141 grains of Iodide of Silver.—LOND.

POTASSII SULPHURETUM.

		Hepar Sulphuris.
	Sulphur - - - - - 1oz. Carbonate of Potash - 4oz.	Sublimed Sulphur - - 4oz. Carbonate of Potash from Pearlash, first dried, and then reduced to powder, 7oz.
In the Mat. Med. No process given.	Triturate them well together, and heat them in a covered crucible till they form a uniform fused mass; which, when cold, is to be broken into fragments and kept in well closed vessels.	Mix these ingredients in a warm mortar, and having introduced them into a Hessian crucible, let this be heated, first gradually, until effervescence has ceased, and finally to low redness, so as to produce perfect fusion, and let its liquid contents be then poured into an iron cup, over which a second vessel should be immediately inverted, so as to exclude the air as completely as pos-

CONTINUED.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT. sible, while solidification is taking place. The solid product thus obtained should, when cold, be broken into fragments, and immediately enclosed in a green glass bottle, furnished with an air-tight stopper.

DOSE.—3 to 10 grains, dissolved in some aromatic water. Externally, 4 ounces in 30 gallons of tepid water, for a bath, in diseases of the skin.

This is a mixture of one atom Sulphate of Potash with three of Tersulphuret of Potassium.

INCOMPATIBLES.—Metals, Metallic Solutions, and Acids.

PRUNUM PRÆPARATUM.

LONDON.	EDINBURGH.	DUBLIN.
Prunes - - - - 1 lb. Water sufficient to cover them.	Not in Pharm.	Not in Pharm.
Boil gently for four hours; press the softened pulp, first through a fine sieve made of cane, and afterwards through a fine hair sieve. Lastly, evaporate the pulp in a water bath, to the consistence of a confection.		

PULVERES EFFERVESCENTES.

LONDON.	EDINBURGH.	DUBLIN.
		Pulveres Effervescentes Tartarizati.
Not in Pharm.	Tartaric Acid - - - 1oz. Bicarbonate of Soda 1oz. and 54 grains. Or Bicarbonate of Potash 1oz. and 160 grains.	Crystals of Tartaric Acid ʒx. Bicarbonate of Soda - ʒxi. Or, Bicarbonate of Potash ʒxiii.
	Reduce the Acid and either Bicarbonate, separately, to fine powder, and divide each into 16 powders; preserve the Acid and Alkaline powders in separate papers of different colours.	Reduce the Acid and Alkaline Bicarbonate, separately, to fine powder, and divide each into 18 parts. The Acid and Alkaline Powders should be kept in papers of different colours.
		Pulveres Effervescentes Citrati.
		Crystals of Citric Acid - ʒix. Bicarbonate of Soda - ʒxi. Or, Bicarbonate of Potash ʒxiii.
		Reduce the Acid and Alkaline Bicarbonates separately to a fine powder, and divide each into 18 parts. The Acid and Alkaline Powders should be kept in papers of different colours.

PULVIS ALÖES COMPOSITUS.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Socotorine or Hepatic Aloes 1½oz. Guaiacum Resin - - 1oz. Compound Cinnamon Powder ½oz.	Not in Pharm.	Not in Pharm.
Rub the Aloes and Guaiacum separately to powder, then mix them with the Compound Cinnamon Powder.		

The above name was given to it in 1809, which it has kept in three succeeding Pharmacopœias; it was called Pulv. Aloës c Guaiaco in 1788.

DOSE.—10 to 20 grains, as a cathartic and sudorific.

PULVIS ALUMINIS COMPOSITUS.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Alum - - - - - - - 4oz. Kino - - - - - - - 1oz.	Not in Pharm.
	Mix them, and reduce them to fine powder.	

DOSE.—10 to 40 grains, as an astringent in chronic diarrhœa, and passive hemorrhages from the stomach and bowels.

PULVIS ANTIMONII COMPOSITUS.

LONDON.	EDINBURGH.	DUBLIN.
	Pulvis Antimonialis.	*Pulvis Antimonialis.*
Tersulphuret of Antimony, powdered - - - - 1 lb. Horn Shavings - - - 2 lb.	Sulphuret of Antimony, in coarse powder, Hartshorn Shavings, equal weights.	Tartarized Antimony, Phosphate of Soda, of each 4oz. Chloride of Calcium - 2oz. Solution of Ammonia 4 fl. oz. Distilled Water 1½ gall. or q. s.
Mix and throw into a crucible heated to whiteness, and stir constantly until vapour no longer rises; rub what remains into powder, and put it into a crucible; then apply heat, and increase it gradually that it may continue white for 2 hours; rub the residue into a very fine powder.	Mix them, put them into a red-hot iron pot, and stir constantly till they acquire an ash-gray colour, and vapours no longer arise. Pulverize the product, put it into a crucible with a perforated cover, and expose this to a gradually increasing heat till a white heat be produced, which is to be maintained for 2 hours. Reduce the product, when cold, to fine powder.	Dissolve the Tartarized Antimony in ½ gallon, and the Phosphate of Soda and Chloride of Calcium, each in one quart of the water. Mix the solutions of the Tartarized Antimony and Phosphate of Soda when cold, and then pour in the solution of Chloride of Calcium, having first added to the latter the water of Ammonia. Boil now for 20 minutes, and having collected the precipitate, which will have then formed, on a calico filter, wash it with hot distilled water, until the liquid which passes through ceases to give a precipitate with a dilute solution of Nitrate of Silver. Finally, dry the product by a steam or water heat, and reduce it to a fine powder.

This is introduced into our Pharmacopœias to supersede the employment of Dr. James's Fever Powder, but the Faculty continue to prescribe the patent medicine, which they have been so long accustomed to.

DOSE.—From 3 to 8 grains, repeated every four or six hours.

REMARKS.—A mixture chiefly of Antimonious Acid and Phosphate of Lime, with some Sesquioxide of Antimony, and a little Antimonite of Lime. Distilled Water, boiled with it and filtered, gives with Sulphuretted Hydrogen an orange precipitate; Muriatic Acid digested with the residue, becomes yellow; does not become turbid by dilution, but gives a copious orange precipitate with Sulphuretted Hydrogen.—EDIN.

PULVIS AROMATICUS.

Vide Pulvis Cinnamomi Compositus.

PULVIS CATECHU COMPOSITUS.

Not in Pharm.	Not in Pharm.	Catechu, Kino, - - - of each 2oz. Cinnamon, Nutmeg, - - of each ½oz.
		Reduce each to powder, mix and pass through a fine sieve. When prepared, the powder should be kept in well-stopped bottles.

DOSE.—Half a drachm to a drachm. Astringent and aromatic.

PULVIS CINNAMOMI COMPOSITUS.

	Pulvis Aromaticus.	*Pulvis Aromaticus.*
Cinnamon - - - - - 2oz.	Cinnamon,	Cinnamon - - - - - 2oz.
Cardamom Seeds - - 1½oz.	Cardamom Seeds,	Cardamom Seeds, freed from their capsules - - - 1oz.
Ginger - - - - - - 1oz.	Ginger, of each, equal parts.	Ginger - - - - - - 2oz.
Long Pepper - - - - ½oz.		Nutmeg - - - - - 1oz.
Rub together, so that a very fine powder may be made.	Mix them, and reduce to a very fine powder, which is to be kept in well-closed glass vessels.	Rub each, separately, to powder, and, having mixed them by trituration, pass them through a fine sieve. When prepared, the powder should be kept in well-stopped bottles.

The Pulvis Aromaticus of Pharm. L. 1788. The composition of the three Colleges being so similar, they might have been made the same.

DOSE.—5 to 10 grains, in form of bolus, or in water. Stimulant and carminative.

PULVIS CRETÆ COMPOSITUS.

Prepared Chalk - - - ½ lb.	Prepared Chalk - - - 4oz.	Prepared Chalk - - - 5oz.
Cinnamon - - - - - 4oz.	Cinnamon, in fine powder ʒ iss.	Cinnamon - - - - 2½oz.
Tormentil Root, Gum Acacia, - of each 3oz.	Nutmeg, in fine powder - ʒi.	Nutmeg - - - - - ½oz.
Long Pepper - - - - ½oz.		Gum Arabic - - - - 2oz.
Rub them separately into very fine powder, then mix them.	Triturate them well together.	Rub the ingredients separately to powder, then mix and pass through a fine sieve.

The London and Dublin formulæ very closely resemble each other; the former has the astringent property of the Tormentilla.

The Edinburgh has a larger proportion of Chalk to the Aromatics.

DOSE.—5 to 30 grains, as an astringent and antacid.

PULVIS CRETÆ COMPOSITUS CUM OPIO.

	Pulvis Cretæ Opiatus.	AVOIRDUPOIS WEIGHT. *Pulvis Cretæ Opiatus.*
Compound Chalk Powder 6½oz.	Compound Chalk Powder 6oz.	Compound Powder of Chalk 4oz. ʒ vii.
Powdered Opium - - ℈iv.	Powder of Opium - - ℈iv.	Opium, in fine powder - ʒ i.
Mix.	Triturate them together thoroughly.	Mix them intimately, and pass through a fine sieve.

The proportions of Opium in all three are very nearly alike, viz., 1½ grain in each drachm.

DOSE.—5 to 30 grains. Astringent, anodyne.

INCOMPATIBLES.—Acids, and Acidulous Salts.

PULVIS DOVERI.

Vide Pulvis Ipecacuanhæ Compositus.

PULVIS FERRI.

Vide Ferri Pulvis.

PULVIS JALAPÆ COMPOSITUS.

Jalap Root - - - - 3oz. Bitartrate of Potash - 6oz. Ginger - - - - - - ʒii.	Jalap, in powder - - 1oz. Bitartrate of Potash - 2oz.	Jalap, in fine powder - 2oz. Bitartrate of Potash - 3½oz. Ginger, in powder - - ½oz.
Rub them separately into powder, then mix.	Triturate them to a very fine powder.	Mix thoroughly by trituration, and pass the powder through a sieve.

The proportions of Jalap in each formula are the same. Edinburgh omits the Ginger.

DOSE.—20 to 40 grains. Purgative.

PULVIS IPECACUANHÆ COMPOSITUS.

Powdered Ipecacuanha, Powdered Opium, of each ʒ i.	Ipecacuan, in powder, Powder of Opium, of each 1oz.	Ipecacuan, in fine powder, Opium, in fine powder, of each, ʒi.
Powdered Sulphate of Potash, 1oz.	Sulphate of Potash - - 8oz.	Sulphate of Potash - - 1oz.
Mix.	Triturate them together thoroughly.	Mix thoroughly by trituration, and pass the powder through a fine sieve.

Commonly known as Dover's Powder, and highly valued as a powerful sudorific.

The three Colleges of one strength, viz., 1 grain of Opium in 10 grains of powder.

DOSE.—5 to 15 grains, in bolus or in gruel.

PULVIS KINO COMPOSITUS.

Kino - - - - - - - ʒxv. Cinnamon - - - - - ½oz. Dried Opium - - - - ʒi.	Not in Pharm.	Not in Pharm.
Rub them separately into very fine powder, then mix them.		

Not very often prescribed. 1 grain of Opium in 20 grains of Powder.

DOSE.—5 to 20 grains. Astringent in chronic diarrhœa; said to be useful in pyrosis.

PULVIS RHEI COMPOSITUS.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Rhubarb, in fine powder - 4oz. Magnesia - - - - - 1 lb. Ginger, in fine powder - 2oz.	Rhubarb, in fine powder - 2oz. Magnesia - - - - - 6oz. Ginger, in fine powder - 1oz.
	Mix them thoroughly, and preserve the powder in well-closed bottles.	Mix thoroughly by trituration, pass the powder through a fine sieve, and keep it in well-closed bottles.

Known as Gregory's Powder.

DOSE.—Half a drachm to 1 drachm for adults; 5 to 12 grains for children. A cooling antacid laxative.

PULVIS SALINUS COMPOSITUS.

Not in Pharm.	Pure Muriate of Soda, and Sulphate of Magnesia, of each 4oz. Sulphate of Potash - - 3oz.	Not in Pharm.
	Dry the Salts separately with a gentle heat, and pulverize each, then triturate them well together, and preserve the mixture in well-closed vessels.	
	DOSE.—2 to 4 drachms. Cathartic.	

PULVIS SCAMMONII COMPOSITUS.

Scammony, Hard Extract of Jalap, of each, 2oz. Ginger - - - - - - ½oz.	Scammony, Bitartrate of Potash, of each equal parts.	Scammony, in fine powder 1oz. Compound Powder of Jalap, 3oz.
Rub them separately into very fine powder, and mix.	Triturate them together to a very fine powder.	Mix thoroughly by trituration, and pass the powder through a fine sieve.

London most active; Edinburgh next; and Dublin the weakest.

DOSE.—5 to 20 grains. Cathartic.

PULVIS STANNI.

Vide Stanni Pulvis.

PULVIS TRAGACANTHÆ COMPOSITUS.

Powdered Tragacanth, Powdered Acacia, Starch, - - - of each 1½oz. Sugar - - - - - - 3oz.	Tragacanth, bruised, Gum Arabic, bruised, Starch, - - - of each 1½oz. Pure Sugar - - - - 3oz.	Not in Pharm.
Rub the Starch and Sugar together to powder, then, the Tragacanth and Acacia being added, mix them all.	Reduce the Starch and Sugar together to powder, then add the Tragacanth and Gum Arabic, and pulverize the mixture thoroughly.	

DOSE—10 to 60 grains. Demulcent. Generally used for administering Calomel and other heavy powders to children.

QUINÆ DISULPHAS.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
	Quinæ Sulphas.	*Quinæ Sulphas.*
In the Mat. Med.	A process.	A process.
A salt prepared from Yellow Bark.	(*Vide* Appendix.)	(*Vide* Appendix.)
Crystals.		

DOSE.—1 to 5 grains three times a day, as a tonic, or in larger doses as an antiperiodic.

INCOMPATIBLES.—Alkalies and their Carbonates, Lime Water, Tartaric Acid, Tannic Acid, and all Astringent Liquors.

TEST.—Soluble in water, especially if mixed with an acid, Quina is thrown down on the addition of Ammonia. The liquor being evaporated, what remains ought not to taste of sugar. 100 grains of the salt lose 8 or 10 grains of water by a gentle heat; it is wholly destroyed by fire. If recently prepared Chlorine, be added to it, and then Ammonia, it turns green. On adding Chloride of Barium to 100 grains dissolved in water, mixed with Hydrochloric Acid, 26·6 grains of Sulphate of Baryta, when dried at a red heat, are precipitated.—LOND. A solution of 10 grains in a fluid ounce of Distilled Water, and 2 or 3 drops of Sulphuric Acid, if decomposed by a solution of half an ounce of Carbonate of Soda in two waters, and heated till the precipitate shrinks and fuses, yields, on cooling, a solid mass, which, when dry, weighs 7·4 grains, and in powder dissolves entirely in solution of Oxalic Acid.

QUINÆ MURIAS.

Not in Pharm.	Not in Pharm.	A process. (*Vide* Appendix.)

Employed in preparing Valerianate of Quina.

QUINÆ VALERIANAS.

Not in Pharm.	Not in Pharm.	A process. (*Vide* Appendix.

DOSE.—1 to 3 grains. Antispasmodic, antiperiodic. Useful in intermittent neuralgia.

TEST.—Occurs in brilliant white crystals, and very light; taste purely bitter, and has a feeble odour of Valerian. Soluble in water, and in spirit; also in oils. Hydrochloric Acid disengages from it a strong odour of Valerianic Acid.

SAGAPENUM PRÆPARATUM.

To be prepared in the same manner as ordered for Ammoniacum Præparatum.	Not in Pharm.	Not in Pharm.

SODÆ ACETAS.

Not in Pharm.	Not in Pharm.	Crystallized Carbonate of Soda of Commerce - 1 lb. or q. s. Acetic Acid of Commerce (Sp. Gr. 1044.) 1 pint. To the Acid, placed in a porcelain capsule, add by degrees the Carbonate of Soda, and taking care that there shall be a slight excess of acid, evaporate the resulting solution till a pellicle begins to form on its surface, and set it by to crystallize. The crystals when drained of the mother liquor, and dried by a short exposure to air on a porous brick, should be enclosed in a well-stopped bottle.

DOSE.—Same as Acetate of Potash; rarely used.

SODÆ BICARBONAS.

LONDON.	**EDINBURGH.**	**DUBLIN.**
In the Mat. Med. No process given.	Fill with fragments of marble a glass jar, open at the bottom and tubulated at the top; close the bottom in such way as to keep in the marble without preventing the free passage of a fluid; connect the tubulature closely by a bent tube and corks with an empty bottle, and this in like manner with another bottle filled with one part of Carbonate of Soda, and two parts of dried Carbonate of Soda well triturated together; and let the tube be long enough to reach the bottom of the bottle. Before closing the last cork closely, immerse the jar to the top in diluted Muriatic Acid contained in any convenient vessel; when the whole apparatus is thus filled with Carbonic Acid Gas, secure the last cork tightly; and let the action go on till next morning, or till gas is no longer absorbed by the salt. Remove the damp salt which is formed, and dry it, either in the air, without heat, or at a temperature not above 120°.	AVOIRDUPOIS WEIGHT. Crystallized Carbonate of Soda of Commerce - - - 2 lb. Distilled Water - 1 quart. Muriatic Acid of Commerce 1½ pint. Water - - - - 3 pints. Chalk, in fragments, 1 lb. or q.s. Having diluted the Muriatic Acid with the water, and dissolved the Carbonate of Soda in the *distilled* water, manipulate with these solutions, and with the Chalk, as directed in the formula for *Potassæ Bicarbonas*, employing also the arrangement of apparatus there described. With the view, however, of obtaining from the mother liquor an additional quantity of Bicarbonate, it is not necessary that the evaporation shall be preceded by a filtration.

The properties and dose are too well known to need insertion here.

TEST.—Soluble in water; it slightly changes turmeric to brown. From this solution neither Bichloride of Platinum nor Sulphate of Magnesia, unless heat be applied, throws anything down; what Chloride of Barium throws down is dissolved by Hydrochloric Acid. 100 grains of this substance added to dilute Sulphuric Acid evolve 51·7 grains of Carbonic Acid.—LOND. A solution in 40 parts of water does not give an orange coloured precipitate with solution of Corrosive Sublimate, (shewing the absence of Simple Carbonate of Soda).—EDIN.

SODÆ CARBONAS EXSICCATA.

Carbonate of Soda - - 1 lb. Apply heat to the Carbonate until the crystals crumble down; afterwards burn to redness. Lastly, rub to powder.	Heat any convenient quantity of Carbonate of Soda in a shallow vessel till it is dry, then urge it with a red heat in a crucible, and reduce it to powder when cold.	Crystallized Carbonate of Soda of Commerce; any convenient quantity. Expose it in a porcelain capsule to a pretty strong sand heat, until the liquid which first forms is converted into a dry cake, and having rubbed this to powder, inclose it in a bottle.

54 grains of this are equal to 144 grains of the Crystallized Salt.

DOSE.—5 to 20 grains. Antacid.

It is soluble in water. 100 grains, added to dilute Sulphuric Acid, emit 40·7 grains of Carbonic Acid.

LONDON.	**EDINBURGH.**	**DUBLIN.**

SODÆ PHOSPHAS.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Crystals. No process given.	A process. (*Vide* Appendix.)	AVOIRDUPOIS WEIGHT. A process. (*Vide* Appendix).

The tasteless Aperient Salt, particularly adapted for children; also given with advantage in cases of deposits of Uric Acid in the urine.

DOSE.—4 to 8 drachms.

TEST.—Effloresces on exposure to air; soluble in water. This solution turns turmeric slightly brown. What is thrown down by Chloride of Barium is white, and dissolves without effervescence in Nitric Acid; the precipitate thrown down by Nitrate of Silver is *yellow* (Phosphate of Silver), and is dissolved by the same acid. At a red heat, 100 grains give off 62·3 grains of water. What is thrown down by Nitrate of Silver, from the remaining salt dissolved in water, is *white* (Pyrophosphate of Silver).—LOND. 45 grains dissolved in 2 fluid ounces of boiling distilled water, and precipitated by a solution of 50 grains of Carbonate of Lead in a fluid ounce of Pyroligneous Acid, will remain precipitable by solution of Acetate of Lead.—EDIN.

SODÆ POTASSIO-TARTRAS.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Crystals. No process given.	*Potassæ et Sodæ Tartras.* Bitartrate of Potash - 16oz. Carbonate of Soda - - 12oz. Boiling Water - - 4 pints. Proceed for this preparation exactly as for the Tartrate of Potash.	*Potassæ et Sodæ Tartras.* Crystallized Carbonate of Soda of Commerce - - - 9oz. White Bitartrate of Potash, in fine powder - 12oz. or q. s. Distilled Water - ½ gallon. Dissolve the Carbonate of Soda in the water, and to the solution, while boiling hot, gradually add the Bitartrate, until a neutral solution is obtained. Let this be filtered, evaporated till a pellicle forms on its surface, and then set to crystallize. After 12 hours, the solution should be decanted off the crystals, and these, when dried on blotting paper, should be preserved in a bottle. By further concentrating the decanted solution, and cooling it, an additional crop of crystals may be obtained.

Rochelle Salt, a mild cooling laxative; it is the aperient ingredient in Seidlitz Powders.

DOSE.—2 to 6 drachms.

TEST.—Entirely and easily soluble in 5 parts of boiling water; 37 grains in solution are not entirely precipitated by 43 grains of Nitrate of Lead.—EDIN. The solution neither changes the colour of litmus nor turmeric. On the addition of either Sulphuric or Muriatic Acid, Bitartrate of Potash is thrown down; on adding either Nitrate of Silver or Chloride of Barium, nothing is thrown down, or only what is re-dissolved by the addition of water.—LOND.

SODÆ SULPHAS.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Crystals. No process given.	The Salt which remains after preparing pure Muriatic Acid 2 lb. Boiling Water - - 3 pints. White Marble, in powder, a sufficiency. Dissolve the Salt in the water, add the Marble so long as effervescence takes place, boil the liquid, and when	In the Mat. Med. No process given.

Soda [illegible] used by [illegible] as a reme-
dy in [illegible] 2 [illegible]

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LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED. neutral. filter it; wash the insoluble matter with boiling water, adding the water to the original liquid; concentrate till a pellicle begins to form, and then let the liquor cool and crystallize.	AVOIRDUPOIS WEIGHT.

Glauber Salt, a much neglected but excellent saline aperient.

TEST.—Exposed to the air it crumbles to powder; is soluble in water. This solution neither changes the colour of litmus nor turmeric; Nitrate of Silver scarcely throws down anything from the dilute solution; at a high temperature 100 grains give out 55·5 grains of water. From 100 grains, dissolved in distilled water, on the addition of Chloride of Barium and Hydrochloric Acid, 71 grains of Sulphate of Baryta, dried at a high temperature, are prepared.—LOND.

SODÆ VALERIANAS.

Not in Pharm.	Not in Pharm.	A process. (*Vide* Appendix.)

Used for making the Valerianates of Iron, Quina, and Zinc.

DOSE.—1 to 2 grains.

SOLUTIONES.

Vide Liquores.

SPIRITUS ÆTHERIS COMPOSITUS.

	Spiritus Ætheris Sulphurici.	*Spiritus Æthereus Oleosus.*
Ether - - - - - 8 fl. oz. Rectified Spirit - - 16 fl. oz. Etherial Oil - - - fl. ʒ iii.	Sulphuric Ether - - 1 pint. Rectified Spirit - - 2 pints.	Rectified Spirit - - 1½ pint. Oil of Vitriol of Commerce, 1½ pint. Sulphuric Ether - - 5 fl. oz.
Mix.	Mix them. The density of this preparation ought to be ·809.	Mix the Oil of Vitriol with 1 pint of the Rectified Spirit, in a mattrass of glass, and connecting this with a Liebig's condenser, apply heat, and distil till a black froth begins to rise. Separate the uppermost or lighter stratum of the distilled liquid, and, having exposed it in a capsule for 24 hours to the atmosphere, let the residual oil be transferred to a moist paper filter, and washed with a little cold water, so as to remove any adhering acid. Let it now be introduced into a bottle containing the remainder of the Spirit mixed with the Ether, and dissolved.

The three corresponding preparations are here grouped together for comparison.

All contain the same proportion of Spirit and Ether. Edinburgh has no Etherial Oil.

SPIRITUS ÆTHERIS NITRICI.

LONDON.	EDINBURGH.	DUBLIN
Rectified Spirit - - 2 pints. Nitric Acid - - - 3½ fl. oz. Add the Acid by degrees to the Spirit, and mix; then let 28 fluid ounces distil.	A process. (*Vide* Appendix.)	AVOIRDUPOIS WEIGHT. *Spiritus Æthereus Nitrosus.* A process. (*Vide* Appendix.)

TEST.—Its specific gravity is ·834, LOND.; ·847, EDIN. It slightly changes the colour of litmus to red. Carbonate of Soda being added, no bubbles of Carbonic Acid escape.—LOND. When agitated with twice its volume of concentrated solution of Muriate of Lime, 12 per cent. of Ether slowly separates.—EDIN.

SPIRITUS ÆTHERIS OLEOSUS.

Vide Spiritus Ætheris Compositus.

SPIRITUS ÆTHERIS SULPHURICI.

Vide Spiritus Ætheris Compositus.

SPIRITUS AMMONIÆ.

Not in Pharm.	Rectified Spirit - - 2 pints. Fresh burnt Lime - - 12oz. Muriate of Ammonia, in very fine powder - - - 8oz. Water - - - - - 6½ fl. oz. Let the Lime be slaked with the water in an iron or earthenware vessel, and cover the vessel till the powder be cold; mix the Lime and Muriate of Ammonia quickly and thorougly in a mortar, and transfer the mixture at once into a glass retort; adapt to the retort a tube which passes nearly to the bottom of a bottle containing the Rectified Spirit; heat the retort in a sand-bath gradually, so long as anything passes over, preserving the bottle cool. The bottle should be large enough to contain one-half more than the Spirit used.	Not in Pharm.

The Sp. Ammoniæ Pharm. L. 1836, was a *carbonate*; this is very properly relinquished, as it has led to errors in the preparation of the Scotch Paregoric.

LONDON. **EDINBURGH.** **DUBLIN.**

SPIRITUS AMMONIÆ AROMATICUS.

		AVOIRDUPOIS WEIGHT.
Hydrochlorate of Ammonia 6oz.	Spirit of Ammonia - 8 fl. oz.	Rectified Spirit - - 3 pints.
Carbonate of Potash - 10oz.	Volatile Oil of Lemon Peel fl. ʒ i.	Stronger Solution of Ammonia 6 fl. oz.
Bruised Cinnamon,	Volatile Oil of Rosemary fl. ʒ iss.	Oil of Lemon - - - ½ fl. oz.
Bruised Cloves, of each ʒ iiss.		Oil of Nutmeg - - fl. ʒ ii.
Lemon Peel - - - - 5oz.		Oil of Cinnamon - - fl. ʒ ss.
Rectified Spirit,		
Water, - - of each 4 pints.		
Mix and distil 6 pints.	Dissolve the Oils in the Spirit by agitation.	Dissolve the Oils in the Spirit, and add the Solution of Ammonia; mix with agitation, and filter.
(Sp. Gr. ·918.)		(Sp. Gr. .852.)

The Spirit of Sal Volatile. London orders distillation, and is a *carbonate*; the other two are solutions of *pure* Ammonia.

DOSE.—Half a drachm to a drachm. Stimulant in langour.

INCOMPATIBLES.—Acids, Acidulous Salts, Earthy and Metallic Salts, and Lime Water.

SPIRITUS AMMONIÆ FŒTIDUS.

Hydrochlorate of Ammonia 10oz.	Spirit of Ammonia - 10½ fl. oz.	Stronger Solution of Ammonia 3 fl. oz.
Carbonate of Potash - 16oz.	Assafœtida - - - - ½oz.	Rectified Spirit - - 1½ pint.
Rectified Spirit,		Assafœtida - - - - 1½oz.
Water - - of each 3 pints.		
Assafœtida - - - - 5oz.		
Mix, then distil 3 pints over a slow fire.	Break the Assafœtida into small fragments, digest it in the Spirit for 12 hours, and distil over 10½ fl. oz. by means of a vapour-bath heat.	Break the Assafœtida into small pieces, and macerate it in the Spirit for 24 hours; then distil off the entire of the Spirit, and mix the product with the Solution of Ammonia.
(Sp. Gr. ·861.)		(Sp. Gr. ·849.)

DOSE.—Half a drachm to a drachm. Stimulant, antispasmodic.
Not much employed.

SPIRITUS ANISI.

Oil of Aniseed - - fl. ʒ iii.	Not in Pharm.	Not in Pharm.
Proof Spirit - - - 1 gallon.		
Dissolve.		

The London College has followed the Dublin in the use of Essential Oils for Spirits, instead of seeds, &c., as heretofore, which Pharmaceucists do not approve of.

SPIRITUS ARMORACIÆ COMPOSITUS.

Horse-radish, sliced,	Not in Pharm.	Not in Pharm.
Dried Orange Peel, of each 20oz.		
Bruised Nutmeg - - - ʒ v.		
Proof Spirit - - - 1 gallon.		
Water - - - - - 2 pints.		
Mix them; then, with a slow fire, distil 1 gallon.		

DOSE.—2 to 4 drachms.

SPIRITUS CAMPHORÆ.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Tinctura Camphoræ Ph. 1836.	*Tinctura Camphoræ.*	*Tinctura Camphoræ.*
Camphor - - - - - 5oz.	Camphor, in small fragments 2½oz.	Camphor, in small fragments 1oz.
Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.	Rectified Spirit - - 8 fl. oz.
Dissolve.	Dissolve the Camphor in the Spirit.	Dissolve the Camphor in the Spirit.

London and Dublin alike; Edinburgh half the strength.

The College has now granted to this preparation the name it has borne for more than a century, excepting in the Pharm. of 1836, when it was called Tincture, and subsequently so named by the other Colleges.

SPIRITUS CARUI.

Oil of Caraway - - - fl. ʒii. Proof Spirit - - 1 gallon.	Caraway, bruised - - ½lb. Proof Spirit - - - 7 pints.	Not in Pharm.
Dissolve.	Macerate for two days in a covered vessel; add 1½ pint of water, and distil off 7 pints.	

DOSE.—2 to 4 drachms. Carminative. Stimulant.

SPIRITUS CASSIÆ.

Not in Pharm.	Cassia, in coarse powder 1 lb. Proceed as for the Spirit of Caraway.	Not in Pharm.

DOSE.—2 to 4 drachms. Stomachic.

SPIRITUS CINNAMOMI.

Oil of Cinnamon - - fl. ʒ ii.	Cinnamon, in coarse powder 1 lb.	Not in Pharm.
Proof Spirit - - 1 gallon.		
Dissolve.	Proceed as for the Spirit of Caraway.	

DOSE.—2 to 4 drachms. Stomachic stimulant.

SPIRITUS FORTIOR.

Vide Spiritus Rectificatus.

SPIRITUS JUNIPERI COMPOSITUS.

Oil of Juniper - - - ʒiss. Oil of Caraway, Oil of Fennel, each 12 minims.	Juniper Berries, bruised 1 lb. Caraway, bruised, Fennel, bruised, of each 1½oz.	Juniper Berries, bruised 8oz. Caraway Seed, bruised, Fennel Seed, bruised of each 1oz.
Proof Spirit - - 1 gallon.	Proof Spirit - - - 7 pints. Water - - - - - 2 pints.	Proof Spirit - - ½ gallon. Water - - - - - 1 pint.
Dissolve.	Macerate the fruits in the Spirit for two days, add the water, and distil off 7 pints.	Macerate the Berries and the Seeds in the Spirit for 24 hours; then add the water, and with a slow fire distil off ½ gallon.

DOSE.—2 to 4 drachms. Stimulant, diuretic.

SPIRITUS LAVANDULÆ.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Lavender, fresh - - 2½ lbs. Rectified Spirit - 1 gallon. Mix them, and with the heat of a vapour bath distil over 7 pints.	Not in Pharm.

SPIRITUS LAVANDULÆ COMPOSITUS.

Vide Tinctura Lavandulæ Composita.

SPIRITUS MENTHÆ VIRIDIS.

LONDON.	EDINBURGH.	DUBLIN.
Oil of Spearmint - fl. ʒ iii. Proof Spirit - - 1 gallon. Dissolve.	Not in Pharm.	Not in Pharm.

DOSE.—2 to 4 drachms.

SPIRITUS MENTHÆ PIPERITÆ.

LONDON.	EDINBURGH.	DUBLIN.
	Spiritus Menthæ.	Not in Pharm.
Oil of Peppermint - fl. ʒ iii. Proof Spirit - - 1 gallon. Dissolve.	Peppermint, fresh - 1½ lb. Proceed as for Spirit of Caraway.	

DOSE.—2 to 4 drachms. Carminative. Stimulant.

SPIRITUS MYRISTICÆ.

LONDON.	EDINBURGH.	DUBLIN.
Nutmegs, bruised - - 2½oz. Proof Spirit - - 1 gallon. Water - - - - - 1 pint. Mix them; and then distil 1 gallon over a slow fire.	Bruised Nutmeg - - 2½oz. Proof Spirit - - 1 gallon. Water - - - - - 1 pint. Mix them together, and distil over 1 gallon.	(No process given.)

DOSE.—2 to 4 drachms.

SPIRITUS PIMENTÆ.

LONDON.	EDINBURGH.	DUBLIN.
Oil of Pimento - - fl. ʒ ii. Proof Spirit - - 1 gallon. Dissolve.	Pimento, bruised - - ½ lb. Proceed as for the Spirit of Caraway.	Not in Pharm.

DOSE.—2 to 4 drachms.

SPIRITUS PULEGII.

LONDON.	EDINBURGH.	DUBLIN.
Oil of Pennyroyal - - ʒ iii. Proof Spirit - - 1 gallon. Dissolve.	Not in Pharm.	Not in Pharm.

DOSE.—2 to 4 drachms.

SPIRITUS RECTIFICATUS.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Dilute Alcohol.	In Mat. Med.	AVOIRDUPOIS WEIGHT. *Spiritus Fortior.* Rectified Spirit - ½ gallon. Carbonate of Potash from Pearl-ash - - - - - - 8oz. Dry the Potash at a low red heat, reduce it to powder, shake it occasionally for four hours in a bottle with the Spirit, keeping the temperature of the mixture at about 100°. After a subsidence of 20 minutes duration, the liquid will form two distinct strata the uppermost of which (measuring about 74 ounces) should be separated by decantation or a syphon, and then distilled from a Chloride of Zinc Bath, until the product amounts to 72oz. Sp. Gr. ·818.
Sp. Gr. ·838.	Sp. Gr. ·838.	Sp. Rectificatus ·840.

A colourless liquid; by the addition of water it is not rendered cloudy, nor is it tinged red by Sulphuric Acid. This spirit can be reduced to the standard of the weaker spirit, by adding to every 5 pints, 3 pints of Distilled Water, at a temperature of 628.—LOND. 4 fluid ounces, heated with 25 minims of solution of Nitrate of Silver, (containing 13 grains to the ounce), exposed to bright light for 24 hours, and then passed through a filter purified by weak Nitric Acid, so as to separate the black powder which forms, undergo no farther change, when again exposed to light, with more of the test.—EDIN.

SPIRITUS ROSMARINI.

LONDON.	EDINBURGH.	DUBLIN.
Oil of Rosemary - - fl. ℥ ii. Rectified Spirit - 1 gallon. Dissolve.	Rosemary - - - - 2½ lb. Proceed as for the Spirit of Lavender.	Not in Pharm.

SPIRITUS TENUIOR.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Alcohol more dilute than Rectified Spirit. Sp. Gr. ·920.	Rectified Spirit - - 2 pints. Distilled Water - - 1 pint. Mix them. Sp. Gr. ·912.	Rectified Spirit - - 7 pints. Distilled Water - - 4 pints. Mix. Sp. Gr. ·920.

London and Dublin the same; Edinburgh a trifle stronger.

SPIRITUS VINI CALLICI.

LONDON.	EDINBURGH.	DUBLIN.
In the Mat. Med. Spirit distilled from French Wine. Brandy.	Not in Pharm.	Not in Pharm.

STANNI PULVIS.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Not in Pharm.	Melt Tin in an iron vessel; pour it into an earthenware mortar, heated a little above the melting point of the metal; triturate briskly as the metal cools, ceasing as soon as a considerable portion is pulverized; sift the product, and repeat the process with what remains in the sieve.	AVOIRDUPOIS WEIGHT. Grain Tin, a convenient quantity. Melt the Tin in a black lead crucible, and while it is cooling, stir it with an iron rod until it is reduced to powder. Let the finer particles be separated by means of a sieve, and when after having been several times in succession shaken with distilled water, the decanted liquor appears quite clear, let the product be dried and preserved for use.

STRYCHNIA.

LONDON.	**EDINBURGH.**	**DUBLIN.**
In the Mat. Med. An alkaloid prepared from Nux Vomica. Crystals.	A process. (*Vide* Appendix.)	A process. (*Vide* Appendix.)

DOSE.—One-twelfth of a grain, gradually and slowly increased until its effects are produced. It is better to divide it by trituration with Sugar of Milk before making it into pills; and the crystals (minute octohedra), should be preferred to the powdered state, as is sometimes found in the shops.

TEST.—Soluble in boiling Rectified Spirit. On the application of heat, it liquefies, and if the heat be increased, is destroyed. Its taste is intensely bitter.—LOND. Nitric Acid strongly reddens it; a solution of 10 grains in 4 fluid drachms of water, by means of a fluid drachm of Pyroligneous Acid, when decomposed by a fluid ounce of concentrated solution of Carbonate of Soda, yields, on brisk agitation, a coherent mass, weighing, when dry, 10 grains, and entirely soluble in solution of Oxalic Acid.—EDIN.

If entirely free from Brucia it is not reddened by Nitric Acid.—EDITOR.

REMARK.—It is very sparingly soluble in cold, and only in 2500 parts of boiling water. It is soluble in diluted Alcohol, but insoluble in absolute Alcohol and Ether.

STRYCHNIA MURIAS.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Not in Pharm.	Not in Pharm.	Strychnia - - - - - 1oz. Dilute Muriatic Acid 1 fl. oz. or q. s. Distilled Water - - 2½oz. Pour the Acid upon the Strychnia, and, adding the water, apply heat until a perfect solution is obtained. Let this cool, and let the crystals which form be dried upon bibulous paper. By evaporating the residual liquid to one-third of its bulk, and then allowing it to cool, an additional quantity of the salt will be obtained.

DOSE.—The same as that of Strychnia. When applied by the endermic method, half a grain of the Alkaloid, or any of its salts, may be sprinkled upon the surface, previously denuded of its cuticle.

STYRAX PRÆPARATA.

LONDON.	EDINBURGH.	DUBLIN.
Storax - - - - - - 1 lb. Rectified Spirit - - 4 pints. Dissolve the Storax, and strain through linen; then by means of a gentle heat, distil off the greater part of the Spirit; evaporate what is left to a proper consistence in a water bath.	*Extractum Styracis.* Take any convenient quantity of Storax, in fine powder; exhaust it by boiling it in successive quantities of Rectified Spirit; filter the spirituous solutions; distil off the greater part of the spirit; evaporate the remainder over the vapour bath to the consistence of a thin extract.	AVOIRDUPOIS WEIGHT. Not in Pharm.

SUBLIMATUM CORROSIVUM.

Vide Hydrargyri Bichloridum.

SULPHURIS IODIDUM.

Sulphur - - - - - 1oz. Iodine - - - - - - 4oz. Put the Sulphur in a glass vessel, and place on it the Iodine. Hold the vessel immersed in boiling water until they have united. Afterwards, when it has cooled, the vessel having been broken, break the Iodide into fragments, and keep in another vessel well-stopped.	Not in Pharm.	*Sulphur Iodatum.* Sublimed Sulphur - - ʒ ii. Pure Iodine, in powder - 1oz. Mix the Iodine and Sulphur by trituration in a mortar, and, having transferred the powder to a Florence flask, heat it gently till fusion is effected. When the flask has cooled, let it be broken, in order to the withdrawal of the product, which should be immediately inclosed, and preserved in a well-stopped bottle.

Either process answers perfectly, but the materials ought to be entirely free from moisture.

DOSE.—1 to 3 grains. Rarely given internally; used externally as ointment. *Vide* Ung.

TEST—From 100 grains of this, diligently boiled in water, a residue of about 20 grains of Sulphur is obtained.

SYRUPUS.

Vide Syrupus Simplex.

SYRUPUS ACETI.

Not in Pharm.	Vinegar, French in preference, 11 fl. oz. Pure Sugar - - - - 14oz. Boil them together.	Not in Pharm.

LONDON. **EDINBURGH.** **DUBLIN.**

SYRUPUS ACIDI CITRICI.

Not in Pharm. (*Vide* Syrupus Limonum.)	Not in Pharm. (*Vide* Syrupus Limonum.)	AVOIRDUPOIS WEIGHT. Citric Acid, in powder, Distilled Water, of each 2½oz. Tincture of Lemon Peel fl. ʒ v. Simple Syrup - - 3 pints. Dissolve the Acid in the water with the aid of heat; then add the solution and Tincture of Lemon Peel to the Syrup, and mix with agitation.

SYRUPUS ALTHÆÆ.

Marshmallow Root, dried and sliced - - - - - 1½oz. Sugar - - - - 3 lb. or q. s. Distilled Water - - 1 pint. Rectified Spirit, 2½ fl. oz. or q. s. Macerate the Marshmallow in the water for 12 hours. Press out the liquor, and strain through linen. Then add of Sugar twice the weight of the strained liquid, and dissolve with a gentle heat. Lastly, when the Syrup has cooled, mix to each fluid ounce half a fluid drachm of spirit.	Althæa Root, fresh and sliced 8oz. Pure Sugar - - - - 2½ lb. Boiling Water - - 4 pints. Boil the Althæa Root with the water down to 2 pints; strain and express strongly through calico; let the impurities subside, and dissolve the sugar in the clear liquor with the aid of heat.	Not in Pharm.

The London is now prepared with dried root and *cold* water; it was the same as Edin.

DOSE.—Half an ounce to an ounce. A demulcent. Is apt to ferment by keeping.

SYRUPUS AURANTII.

Dried Orange Peel - 2½oz. Boiling Distilled Water 1 pint. Sugar - - - - 3 lb. or q. s. Rectified Spirit 2½ fl. oz. or q. s. Macerate the Peel in the water for 12 hours in a closed vessel. Press out the liquor, and boil for 10 minutes; then strain, and complete the process in the same manner in which it has been directed concerning Syrup of Marshmallow.	Fresh Bitter Orange Peel 2½oz. Boiling Water - - 1 pint. Pure Sugar - - - - 3 lb. Infuse the Peel in the water for 12 hours in a covered vessel, pour off the liquor, and filter it if necessary; add the sugar to the liquor, and dissolve it with the aid of heat.	Dried Bitter Orange Peel 2½oz. Boiling Distilled Water 1 pint. Refined Sugar, in powder, as much as is sufficient. Infuse the Orange Peel in the water in a covered vessel for 12 hours, and strain without expression; then add to the liquor twice its weight of Sugar, and dissolve with the aid of a steam or water heat.

London and Dublin alike; Edinburgh using fresh peel is weaker.

This is liable to fermentation. Tincture of the fresh peel mixed with syrup would keep better, and be quite as grateful.

SYRUPUS COCCI.

LONDON.	EDINBURGH.	DUBLIN.
Cochineal, bruised - - ℈iv. Boiling Distilled Water 1 pint. Sugar - - - 3 lb. or q. s. Rectified Spirit 2½ fl. oz. or q.s.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Boil the Cochineal for 15 minutes in the water in a closed vessel, frequently stirring it; then strain, and complete the process as has been directed for Syrup of Marshmallow.		

As this is the first officinal preparation of Coccus as a syrup, we want experience to speak of its utility. The Dublin have introduced a Tinct. Cocci in their new Pharmacopœia.

SYRUPUS CROCI.

LONDON.	EDINBURGH.	DUBLIN.
Saffron - - - - - - ʒv. Boiling Distilled Water 1 pint. Sugar - - - - 3 lb. or q. s.	Saffron - - - - - ʒx. Boiling Water - - 1 pint. Sugar - - - - - - 3 lb.	Saffron, chopped fine - ½oz. Boiling Distilled Water 1 pint. Refined Sugar, in powder, as much as is sufficient.
Rectified Spirit 2½ fl. oz. or q. s.		
Macerate the Saffron in the water for 12 hours in a closed vessel; then strain the liquor, and complete the process as has been directed for Syrup of Marshmallow.	Proceed as for the Syrup of Orange-peel.	Infuse the Saffron in the water, in a covered vessel, for 12 hours, then boil for 5 minutes, and strain through calico with expression; let the decoction stand until the sediment subsides, and having then decanted the clear liquor, add to it twice its weight of sugar, and dissolve with the aid of steam or water heat.

The colouring matter is apt to separate on keeping. A remedy was proposed by Mr. Cracknell, to add 2 grains of Carbonate of Potash to every ounce of sugar employed, and boil together. *Vide* Ph. Journal, Vol. vi. p. 72.

SYRUPUS FERRI IODIDI.

LONDON.	EDINBURGH.	DUBLIN.
Iodine - - - - - - 1oz. Iron Wire - - - - ʒiii.	Iodine (dry) - - 200 grains. Fine Iron Wire, recently cleaned - - 100 grains.	Pure Iodine - - - - ʒv. Iron Turnings, separated by a magnet - - - - ʒiii.
Distilled Water 12 fl. oz. or q.s. Sugar - - - - - - 10oz.	Distilled Water - - 6 fl. oz. White Sugar, in powder 4½oz.	Distilled Water - - - 2oz. Simple Syrup - - - 6 fl. oz.
Mix the Iodine and Iron with 8 fluid ounces of water, and heat until the solution assumes a greenish colour; then strain. Evaporate the solution to about 4 fluid ounces, and add to it the sugar. Lastly, when the Syrup has cooled, add as much water as may be necessary, that it may fill the measure of 15oz., and keep it in a well-stopped black glass vessel.	Boil the Iodine, Iron, and water together in a glass mattrass, at first gently to avoid the expulsion of Iodine-vapour, afterwards briskly, until about 2 fluid ounces of liquid remain. Filter this quickly, while hot, into a mattrass containing the Sugar; dissolve the Sugar with a gentle heat, and add distilled water, if necessary, to make up 6 fluid ounces.	Introduce the Iodine, Iron, and water, into a glass flask, and apply a moderate heat until the solution loses its red colour. Filter the solution, while hot, into a bottle containing the Syrup, mix with agitation, and add distilled water, to make up 8 fl. oz.

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
One fluid drachm contains 5 grains of Iodide of Iron.	One fluid drachm contains 5 grains of Iodide of Iron.	One fluid drachm contains about 5 grains of Iodide of Iron.

Syrup protects the Iodide of Iron very much from change; still at the surface a slight tinge of colour proves it is not perfect, and the solution in water, protected by a coil of iron wire, is the best security.

DOSE.—Half a drachm to a drachm. An excellent tonic, given to children in smaller doses.

SYRUPUS HEMIDESMI.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Indian Sarsaparilla, bruised 4oz. Boiling Distilled Water 1 pint. Refined Sugar, in powder, as much as is sufficient. Infuse the Sarsaparilla in the water for 4 hours, in a covered vessel, and strain; set it by until the sediment subsides, then decant the clear liquor, and, having added to it twice its weight of Sugar, dissolve with the aid of a steam or water heat.

Hemidesmus was much prescribed twenty years ago, and found very efficacious in some skin diseases; at present it is not much employed.

SYRUPUS IPECACUANHÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Ipecacuan, in coarse powder 4oz. Rectified Spirit - - 1 pint. Proof Spirit, Water - - of each 14 fl. oz. Syrup - - - - - 7 pints. Digest the Ipecacuan in 15 fluid ounces of the Rectified Spirit at a gentle heat for 24 hours; strain, squeeze the residuum and filter. Repeat this process with the residuum and Proof Spirit; and again with the water. Unite the fluids, and distil off the Spirit till the residuum amounts to 12 ounces; add to the residuum 5 fluid ounces of the Rectified Spirit, and then the Syrup.	Not in Pharm.

A fluid ounce equal to 12 grains of powder.

The French Syrop d'Ipecacuanha contains the Alcoholic Extract, instead of the Spirit, and is stronger than the Edinburgh.

DOSE.—2 fluid ounces, as an emetic for an adult; 2 fluid drachms, as an expectorant and diaphoretic.

SYRUPUS LIMONUM.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Lemon Juice, strained, 1 pint. Sugar - - - - - - - 2½lb. Rectified Spirit - - 2½ fl. oz. Boil the Juice for 10 minutes and strain; to this add the Sugar and dissolve it. Lastly, when the Syrup has cooled, mix in the Spirit.	Lemon Juice, freed from impurities by subsidence and filtration - - - - 1 pint. Sugar - - - - - - - 2½ lb. Dissolve the Sugar in the Lemon Juice with the aid of a gentle heat, and after 24 hours rest remove the scum, and pour the clear liquor from the dregs.	AVOIRDUPOIS WEIGHT. Not in Pharm. (*Vide* Syrupus Acidi Citrici.)

Chiefly used for flavoring other medicines.

DOSE.—2 to 4 fluid drachms.

SYRUPUS MORI.

Mulberry Juice, strained, 1 pt. Sugar - - - - - - 2½lb. Rectified Spirit - - 2½ fl. oz. Dissolve the Sugar in the Juice by a gentle heat, and set by for 24 hours; then remove the scum, and from the dregs, if there be any, pour off the clear liquid: lastly, add the Spirit.	Not in Pharm.	Not in Pharm.

It is singular that this syrup should have found a place in the London Pharmacopœia for nearly a century, and not yet admitted in the Edinburgh or Dublin. It has a fine colour, and very agreeable flavor.

SYRUPUS MORPHIÆ ACETATIS.

Not in Pharm.	Not in Pharm.	Solution of Acetate of Morphia - - - - - 1 fl. oz. Simple Syrup - - 15 fl. oz. Mix with agitation. A fluid ounce contains one-fourth of a grain of Acetate of Morphia. Dr. Neligan, in his work on Medicine, designates this as a useless preparation.

SYRUPUS MORPHIÆ MURIATIS.

Not in Pharm.	Not in Pharm.	Solution of Muriate of Morphia - - - - - 1 fl. oz. Simple Syrup - - 17 fl. oz. Mix with agitation. A fluid ounce contains one-fourth of a grain of Muriate of Morphia. Dr. Neligan also terms this a useless preparation.

SYRUPUS PAPAVERIS.

LONDON.	EDINBURGH.	DUBLIN.
Poppy Capsules, bruised, rejecting the seeds - - 3 lb. Sugar - - - - - - - 5 lb. Boiling Distilled Water 5 gallons. Rectified Spirit - - 5 fl. oz.	Poppy Heads, without the seeds - - - - - - 1½ lb. Pure Sugar - - - - 3 lb. Boiling Water - - 15 pints.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Boil down the water with the Poppy Heads to 2 gallons, and strongly press; again boil down the strained liquor to 4 pints, and strain while yet hot. Set it aside for 12 hours, that the dregs may subside; then boil down the strained liquor to 2 pints, and in this dissolve the Sugar; lastly, mix with it the Spirit.	Slice the Poppy Heads; infuse them in the water for 12 hours; boil down to 5 pints; strain, and express strongly through calico; boil again down to 2½ pints; then add the Sugar, and dissolve it with the aid of heat.	

DOSE of the London, 2 drachms to 4 drachms; Edin. 3 drachms to 6 drachms.

SYRUPUS RHAMNI.

LONDON.	EDINBURGH.	DUBLIN.
Juice of Buckthorn Berries 4 pints. Ginger, sliced, Bruised Pimento, of each ʒ vi. Sugar - - - - - - 6 lbs. Rectified Spirit - - 6 fl. oz.	Fresh Juice of Buckthorn Berries - - - - - 4 pints. Ginger, sliced, Pimento, bruised, of each ʒ vi. Pure Sugar - - - - 4 lb.	Not in Pharm.
Set aside the juice for 3 days, that the dregs may subside, and then strain. To a pint of the strained juice add the Ginger and Pimento; then macerate with a gentle heat for 4 hours, and strain; boil down the rest of the juice to 1½ pint. Mix the liquors, and in these dissolve the sugar; lastly, mix in the spirit.	Let the Juice rest for 3 days; pour off the clear liquor and filter it. Digest the Ginger and Pimento in a pint of the filtered liquor, at a gentle heat, for 4 hours, and filter. Boil down the rest of the Juice to 1½ pint; mix the two liquors, add the Sugar, and dissolve it with the aid of heat.	

The Pharm. L. 1836, was exactly like the Edinburgh; but in this, 6 lb. of Sugar, and 6oz. of Rectified Spirit, stand in the place of 4 lb. of Sugar, formerly ordered. The former Syrup kept very well, and one regrets any unnecessary deviation from uniformity.

SYRUPUS RHŒADOS.

LONDON.	EDINBURGH.	DUBLIN.
Red Poppy Petals - - 1 lb. Boiling Distilled Water 1 pint. Sugar - - - - 3 lb. or q.s. Rectified Spirit 2½ fl. oz. or q.s.	Corn Poppy Petals - - 1 lb. Boiling Water - - 1 pint. Pure Sugar - - - - 2½ lb.	Not in Pharm.
Frequently stirring, add the Red-Poppy Leaves gradually to the water, heated in a water-bath; then, the vessel being removed, macerate for 12 hours; afterwards press out the liquor with the hand, strain, and finish the process as has been directed for Syrup of Marshmallow.	Heat the water over a vapour-bath, add the Petals by degrees, stirring occasionally; remove the vessel from the bath, infuse for 12 hours; strain and express the liquor; add to it the Sugar, and dissolve this with the aid of heat.	

Its fine colour admits it into both mixture and linctus.

SYRUPUS ROSÆ.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Fresh Damask Rose Petals 7oz. Sugar - - - - - - 6 lb. Boiling Distilled Water 3 pints. Rectified Spirit - - 5½ fl. oz.	*Syrupus Rosæ Centifoliæ.* Fresh Damask Rose Petals 1 lb. Pure Sugar - - - - 3 lb. Boiling Water - - 3 pints.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Macerate the Rose. Petals in the water for 12 hours, and strain; evaporate the strained liquor in a water-bath to 2 pints, and in this dissolve the Sugar; lastly, mix with it the Spirit.	Infuse the Petals in the water for 12 hours, strain the liquor, and dissolve the Sugar in it with the aid of heat.	

London uses the same weight of *fresh* petals as it did of the *dry*, in Pharm. 1836.

DOSE.—2 drachms to an ounce. Said to be laxative. Its colour is very inferior to the following Syrup.

SYRUPUS ROSÆ GALLICÆ.

Not in Pharm.	Dried Red Rose Petals - 2oz. Boiling Water - - 1 pint. Pure Sugar - - - - 20oz.	Petals of the Gallic Rose, dried 2oz. Boiling Distilled Water 1 pint. Refined Sugar, in powder, as much as is sufficient.
	Proceed as for the Syrup of Damask Rose.	Boil the Petals in the water, in a glass or porcelain vessel, until their colour is completely extracted; strain with expression, and let the decoction stand until the sediment subsides; then, having decanted the supernatant liquor, add to it twice its weight of Sugar, and dissolve with the aid of a steam or water heat.

Contains Tannic Acid; is therefore astringent, and is used in gargles, acidified by Sulphuric or Hydrochloric Acids; also to give colour to acid mixtures. Alkalies and Alkaline Salts turn it green.

SYRUPUS SARSÆ.

Sarsaparilla - - - - 3½ lb. Distilled Water - 3 gallons. Sugar - - - - - - 18oz. Rectified Spirit - - 2 fl. oz.	Sarza, in chips - - - 15oz. Boiling Water - - 1 gallon. Pure Sugar - - - - 15oz.	Not in Pharm.
Boil the Sarsaparilla in 2 gallons of water down to 1 gallon; pour off the liquor and strain while hot. Again, boil the Sarsaparilla in the remaining water down to half, and strain. Evaporate the liquors mixed together to 2 pints, and in these dissolve the sugar; lastly, when they have cooled add to them the spirit.	Infuse the Sarsaparilla in the water for 24 hours; boil down to four pints, and strain the liquor while hot; add the Sugar, and evaporate to the consistence of Syrup.	

The present London is more than twice the strength of Pharm. L. 1836, which was what Edinburgh now is.

SYRUPUS SCILLÆ.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Vinegar of Squill - 3 pints. Pure Sugar, in powder - 7lb.	Vinegar of Squill - 8 fl. oz. Refined Sugar, in powder, 1 lb.
	Dissolve the Sugar in the Vinegar of Squills with the aid of a gentle heat and agitation.	Dissolve the Sugar in the Vinegar of Squill, with the aid of a steam or water heat.
	DOSE.—1 to 2 drachms.	

SYRUPUS SENNÆ.

Senna - - - - - - 3½oz. Fennel Seed, bruised - ʒ x. Manna - - - - - - 3oz. Boiling Distilled Water 1 pint. Treacle - - - - - - 3 lb.	Senna - - - - - - 4oz. Boiling Water 1 pint and 4 fl. oz. Treacle - - - - - 48oz.	Not in Pharm.
Macerate the Senna and Fennel Seed in the water for 6 hours, with a gentle heat; strongly press out the liquor through linen, and strain, and add to it the Manna. Evaporate the Treacle in a water bath until some part of it most remote from the fire almost concretes, and to it while hot, add the liquor, stirring diligently until they are well mixed.	Infuse the Senna in the water for 12 hours; strain and express strongly through calico, so as to obtain 1 pint and 2 fl. oz. at least of liquid. Concentrate the Treacle in the vapour-bath as far as possible, or till a little taken out upon a rod becomes nearly concrete on cooling; and while the Treacle is still hot, add the infusion, stirring carefully, and removing the vessel from the vapour-bath as soon as the mixture is complete. If Alexandrian Senna be used for this preparation, it must be carefully freed of Cynanchum leaves by picking it.	

A larger proportion of Senna than in P. L. 1836, and Treacle substituted for white Sugar. It now, therefore, more closely resembles the Edinburgh form.

DOSE.—1 to 4 drachms, for children as a laxative, or in addition to cathartic mixtures for adults.

SYRUPUS SIMPLEX.

Syrupus.		
Sugar - - - - - 3 lbs. Distilled Water - - 1 pint.	Pure Sugar - - - 10 lbs. Boiling Water - - 3 pints.	Refined Sugar, in powder, 5 lbs. Distilled Water - - 2 pints.
Dissolve with a gentle heat.	Dissolve the Sugar in the water with the aid of a gentle heat.	Dissolve the Sugar in the water with the aid of a steam or water heat. (Sp. Gr. 1·130.)

The Sugar is now in less quantity than in 1836; it was, what Edinburgh now is. It is now, however, the same as Dublin, and not so liable to crystallize.

SYRUPUS TOLUTANUS.

LONDON.	EDINBURGH.	DUBLIN.
Balsam of Tolu - - - ℥x. Boiling Distilled Water 1 pint. Sugar - - - - - 2½ lb.	Tincture of Tolu - - 1 oz. Simple Syrup - - - 2 lb.	AVOIRDUPOIS WEIGHT. Balsam of Tolu - - - 1 oz. Distilled Water - - 1 pint. Refined Sugar, in powder, as much as is sufficient.
Boil the Balsam in the water for ½ hour in a closed vessel, frequently stirring it, and when cold strain the liquor; then add the Sugar, and dissolve it.	When the Syrup has been recently prepared, and has not altogether cooled, add the Tincture of Tolu by degrees, agitating briskly.	Boil the Balsam in the water for ½ hour, in a lightly covered vessel, occasionally stirring, and strain the liquor when cold; then, having added to it twice its weight of Sugar, dissolve with the aid of a steam or water heat.

DOSE.—2 to 4 drachms, in cough mixtures.

SYRUPUS VIOLÆ.

Violets (recent petals) - 9 oz. Boiling Distilled Water 1 pint. Sugar - - - 3 lb. or q. s. Rectified Spirit 2½ fl. oz. or. q. s.	Fresh Violets - - - 1 lb. Boiling Water - - 2½ pints. Pure Sugar - - - 7½ lb.	Not in Pharm.
Macerate the violet flowers in water for 12 hours, then press and strain; set aside, that the dregs may subside, and complete the process as has been ordered for Syrup of Marshmallow.	Infuse the flowers for 24 hours in the water, in a covered glass or earthenware vessel; strain without squeezing, and dissolve the sugar in the filtered liquor.	

The London has now introduced it, and the Dublin discontinued it.

DOSE.—1 to 4 drachms. Mild laxative for children.

SYRUPUS ZINGIBERIS.

Ginger, sliced - - - 2½ oz. Boiling Distilled Water 1 pint. Sugar - - - 2½ lb. or q. s. Rectified Spirit - - - q. s.	Ginger - - - - - 2½ oz. Boiling Water - - 1 pint. Pure Sugar - - - 2½ lb.	Tincture of Ginger - 1 fl. oz. Simple Syrup - - 7 fl. oz.
Macerate the Ginger in the water for 4 hours; press out the liquor, and strain; then complete the process as directed under Syrup of Marshmallow.	Bruise the Ginger; infuse it for 4 hours in the water, and to the strained liquor add the Sugar, and dissolve it with the aid of heat.	Mix with agitation.

DOSE.—1 to 4 drachms.

TAMARINDUS PRÆPARATUS.

Tamarinds - - - - 1 lb. Water, enough to cover them.	Not in Pharm.	Not in Pharm.
Macerate with a gentle heat for 4 hours, and complete the process the same way as has been ordered for Prepared Prunes.		

THUS PRÆPARATUM.

LONDON.	**EDINBURGH.**	**DUBLIN.**
Frankincense - - - 1 lb. Water, enough to cover it. Boil the Frankincense in the water until it melts, and strain through a hair sieve; then, when it has cooled, the water being poured off, keep the Frankincense for use.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.

TINCTURA ACONITI.

Aconite Root, coarsely powdered - - - - - 15 oz. Rectified Spirit - - 2 pints. Macerate for 7 days; then press out, and strain.	Not in Pharm.	*Tinctura Aconiti Radicis.* Aconite Root, dried, and cut small - - - - - 10oz. Rectified Spirit - - 1 pint. Macerate for 14 days; strain, express, and filter.

Now introduced in the London Pharmacopœia, and is of the same strength Dr. Turnbull is in the habit of prescribing. Dublin form is considerably stronger; and Dr. Fleming's (much in use), stronger still. Hence the necessity of *particularising*, when prescribing so powerful a medicine.

DOSE of London, 7 to 10 minims; Dublin, 5 to 8 minims; Fleming, 3 to 5 minims.

TINCTURA ALÖES.

Socotrine or Hepatic Aloes, coarsely powdered - 1oz. Extract of Liquorice - 3oz. Distilled Water - 1½ pint. Rectified Spirit - - ½ pint. Macerate the Aloes in the Spirit, mixed with the water, for 7 days; afterwards add the Extract that it may be dissolved, and strain.	Aloes (Socotrine or Indian,) in coarse powder - - 1oz. Extract of Liquorice - 3oz. Water - 1 pint and 8 fl. oz. Rectified Spirit - 12 fl. oz. Mix them, and digest for 7 days, with occasional agitation; filter the clear liquor, separated from the sediment. This Tincture cannot, without difficulty and delay, be prepared by percolation.	Not in Pharm.

DOSE.—Half a drachm to half an ounce.

TINCTURA ALÖES COMPOSITA.

Socotrine or Hepatic Aloes, coarsely powdered - 4oz. Saffron - - - - - 2oz. Tincture of Myrrh - 2 pints. Macerate for 7 days, and strain.	*Tinctura Aloes et Myrrhæ.* Aloes (Socotrine or Indian,) in coarse powder - - 4oz. Saffron - - - - - - 2oz. Tincture of Myrrh - 2 pints. Digest for 7 days, and filter the clear superincumbent liquor. This Tincture cannot be well prepared by percolation.	Not in Pharm.

DOSE.—1 to 2 drachms. Purgative, stomachic.

TINCTURA AMMONIÆ COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
Mastich - - - - - ʒ ii.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Rectified Spirit - - fl. ʒ ix.		
Oil of Lavender - 14 minims.		
Stronger solution of Ammonia, Sp. Gr. ·882. 1 pint.		
Macerate the Mastich in the Spirit, that it may be dissolved; pour off the Tincture, freed from dregs; then, the remaining ingredients being added, shake all well together.		

Formerly called Eau de Luce, the Oil of Amber, (in Pharm. L. 1836); is now omitted.

DOSE.—5 to 10 minims, in water. Stimulant and Antispasmodic.

TINCTURA ASSAFŒTIDÆ.

Assafœtida, broken in small pieces - - - - - 5oz.	Assafœtida, in small fragments - - - - - 5oz.	Assafœtida, in small fragments - - - - - 5oz.
Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.	Rectified Spirits - 2 pints.
Macerate for 7 days, and strain.	Digest for 7 days, and filter the clear liquor. This Tincture cannot be made by percolation without much delay.	Macerate for 14 days; strain, express, and filter.

DOSE.—Half a drachm to a drachm and a half. Stimulant, antispasmodic.

Is best given with Mucilage, as the Resin separates when mixed with water only.

TINCTURA AURANTII.

Dried Orange Peel - 3½oz.	Bitter Orange Peel, dried, 3½oz.	Bitter Orange Peel, dried, 4oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press, and strain.	Digest for 7 days; strain, and express strongly, and filter the liquor. This Tincture may be prepared by percolation, by cutting the Peel into small fragments, macerating it in a little of the Spirit for 12 hours, and beating the mass into a coarse pulp before putting it into the percolator.	Macerate for 14 days; strain, express, and filter.

All of the same strength.

DOSE.—2 to 3 drachms. Tonic, stomachic; a good adjunct to bitter infusions.

Allowance might have been given here, as in the Infusion, to use fresh orange peel, which the Author has found vastly superior in flavor to the dried; allowance, of course, to be made in the preparation, for the water it contains.

TINCTURA BELLADONNÆ.

Dried Belladonna Leaf - 4oz.	Not in Pharm.	Belladonna Leaves, powdered, 5oz.
Proof Spirit - - - 2 pints.		Proof Spirit - - - 2 pints.
Macerate for 7 days; then press, and strain.		Macerate for 14 days; strain, express, and filter.

Now introduced into the London.

DOSE.—3 to 8 minims. When used as a lotion, 1 drachm to 4 ounces of water.

TINCTURA BENZOINI COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
Benzoin, coarsely powdered, 3½oz.	Benzoin, in coarse powder, 4oz.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Prepared Storax - - 2½oz.	Peru Balsam - - - 2½oz.	
Balsam of Tolu - - - ʒ x.		
Socotrine or Hepatic Aloes, coarsely powdered - ʒ v.	East Indian Aloes - - ½oz.	
Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.	
Macerate for 7 days, and strain.	Digest for 7 days; pour off the clear liquor, and filter it.	

DOSE.—Half a drachm to 2 drachms, triturated with Mucilage, or yolk of Egg.

Applied externally to languid ulcers, and formerly much used for cuts and wounds, under the name of "Friar's Balsam."

TINCTURA BUCHU.

Not in Pharm.	Bucku Leaves - - - 5oz.	Bucku Leaves, bruised - 5oz.
	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
	Digest for 7 days; pour off the clear liquor, and filter it. This Tincture may be conveniently and quickly made also by the process of percolation.	Macerate for 14 days; strain, express, and filter.

TINCTURA CALUMBÆ.

Calumba Root, thinly sliced, 3oz.	Calumba, in small fragments, 3oz.	Calumba Root, in coarse powder - - - - - - 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then express, and strain.	Digest for 7 days; pour off the clear liquor, express the residuum strongly, and filter the liquors. This Tincture is much more conveniently prepared by the process of percolation (the Calumba must then be in moderately fine powder,) allowing the powder to be soaked with a little of the Spirit for 6 hours before putting it into the percolator.	Macerate for 14 days; strain, express, and filter.

DOSE.—1 to 2 drachms. London and Edin. alike. Dublin 50 per cent. stronger.

TINCTURA CAMPHORÆ.

Vide Spiritus Camphoræ.

TINCTURA CAMPHORÆ COMPOSITA.

	Tinctura Opii Camphorata.	*Tinctura Opii Camphorata.*
Camphor - - - - ℈iiss.	Camphor - - - - ℈iiss.	Camphor - - - - - ʒi.
Powdered Opium,	Opium, sliced,	Opium, in coarse powder,
Benzoic Acid, of each 72 grains.	Benzoic Acid, - of each ℈iv.	Benzoic Acid, - of each ʒ iss.
Oil of Aniseed - - - fl.ʒi.	Oil of Anise - - - fl.ʒi.	Oil of Anise - - - fl.ʒi.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - 2 pints.
Macerate for 7 days, and strain.	Digest for 7 days, and then filter.	Macerate for 14 days; strain, express, and filter.

The quantity of Opium in the 2 pints, is 72 grains London; 80 grains Edinburgh; and 82½ grains Dublin. The other differences are immaterial.

DOSE.—1 to 3 drachms. Anodyne. 1 grain of Opium is contained in 4 fluid drachms of Edinburgh.

TINCTURA CANNABIS INDICÆ.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Not in Pharm.	Purified Extract of Indian Hemp - - - - - ½oz.
		Rectified Spirit - - 10oz.
		Dissolve the Extract in the Spirit.
		22 minims contain 1 grain of Extract.

TINCTURA CANTHARIDIS.

LONDON.	EDINBURGH.	DUBLIN.
Cantharides, bruised - ⅜oz.	Cantharides - - - - ⅜oz.	Spanish Flies, in coarse powder - - - - - - - ⅜oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days, then press, and strain.	Digest for 7 days; strain, and express strongly the residuum; filter the liquor. This Tincture may be obtained more conveniently and expeditiously by percolation, provided the Cantharides be reduced to coarse powder, and left, with a little of the Spirit, in the state of pulp for 12 hours, before the process of percolation is commenced.	Macerate for 14 days; strain, express, and filter.

DOSE.—10 minims to a drachm. Diuretic, stimulant. Used externally with Liniment.

TINCTURA CAPSICI.

LONDON.	EDINBURGH.	DUBLIN.
Capsicum, bruised - - ℥x.	Capsicum, bruised - - ℥x.	Cayenne Pods, bruised - 1¼oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 1 pint.
Macerate for 7 days, then press and strain.	Digest for 7 days, strain, squeeze the residuum, and filter the liquors. This Tincture is best prepared by percolation which may be commenced so soon as the Capsicum is made into a pulp with a little of the Spirit.	Macerate for 14 days; strain, express, and filter.

London and Edinburgh alike. Dublin more than twice their strength.

DOSE.—10 minims to a drachm.—LOND. and EDIN; 5 to 25 minims.—DUBLIN.—Stimulant. 1 fluid drachm in an 8oz. gargle, for relaxed throat.

TINCTURA CARDAMOMI.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Seeds of Cardamoms, bruised 4½oz.	Not in Pharm.
	Proof Spirit - - - 2 pints.	
	Digest for 7 days, strain, squeeze the residuum, and filter the liquors. This Tincture may be better prepared by the process of percolation, in the same way with the Tincture of Capsicum, the seeds being first ground in a coffee-mill.	

Now omitted in London.

DOSE.—1 to 2 drachms. Stimulant, carminative.

[illegible] recommends this Tincture in Uterine [illegible]
[illegible] ℥x drachms [illegible] in 8oz mixture [illegible]
[illegible] [illegible] comes on. [illegible]
[illegible] will relieve [illegible]

TINCTURA CARDAMOMI COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Cardamom Seeds, bruised, Caraway Seeds, bruised,	Cardamom Seeds, bruised, Caraway, bruised, of each ʒ iiss.	Cardamom Seeds, bruised, Caraway Seeds, bruised, of each ½oz.
Cochineal, bruised, of each ʒ iiss.	Cochineal, bruised - - ʒ i.	Cochineal, in powder - ʒ ii.
Cinnamon, bruised - - ʒ v.	Cinnamon, bruised - - ʒ v.	Cinnamon, bruised - - 1oz.
Raisins, stoned - - - 5oz.	Raisins - - - - - 5oz.	
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 3 pints.
Macerate for 7 days; then press and strain.	Digest for 7 days; strain, express strongly the residuum, and filter the liquors. This Tincture may be also prepared by the method of percolation, if the solid materials be first beat together, moistened with a little spirit, and left thus for 12 hours before being put into the percolator.	Macerate for 14 days; strain, express, and filter.

Quantity of Cochineal more than doubled in Pharm. L.; it was exactly what the Edinburgh now is. The difference in other materials is unimportant.

TINCTURA CASCARILLÆ.

Cascarilla Bark, bruised - 5oz.	Cascarilla, finely bruised 5oz.	Cascarilla Bark, in coarse powder - - - - - - 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	Proceed by percolation or digestion, as afterwards directed for Tincture of Cinchona.	Macerate for 14 days; strain, express, and filter.

DOSE.—1 to 2 drachms. Tonic, stomachic.

TINCTURA CASSIÆ.

Not in Pharm.	Cassia, in moderately fine powder - - - - - - 3½oz.	Not in Pharm.
	Proof Spirit - - - 2 pints.	
	Digest for 7 days; strain, express the residuum strongly and filter. This Tincture is more conveniently made by the process of percolation, the Cassia being allowed to macerate in a little of the Spirit for 12 hours before being put into the percolator.	

TINCTURA CASTOREI.

Castor, bruised - - - 2½oz.	Castor, bruised - - - 2½oz.	Not in Pharm.
Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.	
Macerate for 7 days; then press and strain.	This Tincture may be prepared either by digestion or percolation, like the Tincture of Cassia.	

DOSE.—20 minims to 2 drachms. Antispasmodic.

TINCTURA CASTOREI AMMONIATA.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Castor, bruised - - - 2½oz. Assafœtida, in small fragments ʒx. Spirit of Ammonia - 2 pints. Digest for 7 days in a well-closed vessel; strain and express strongly the residuum, and filter the liquor. This tincture cannot be so conveniently prepared by the method of percolation.	AVOIRDUPOIS WEIGHT. Not in Pharm.

DOSE.—20 minims to 2 drachms. Preferred by some to the Tinct. Castor.

TINCTURA CATECHU COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
	Tinctura Catechu.	*Tinctura Catechu.*
Powdered Catechu - - 3½oz. Cinnamon, bruised - - 2½oz. Proof Spirit - - - 2 pints. Macerate for 7 days; then press and strain.	Catechu, coarsely powdered 3½oz. Cinnamon, in fine powder 2½oz. Proof Spirit - - - 2 pints. Digest for 7 days; strain and express strongly the residuum; filter the liquors. This tincture may be also prepared by the process of percolation, the mixed powders being put into the percolator without being previously moistened with the spirit.	Catechu, in coarse powder 4oz. Cinnamon, bruised - - 2oz. Proof Spirit - - - 2 pints. Macerate for 14 days; strain. express, and filter.

The quantity of Catechu is alike in all three; in Dublin the Cinnamon is less.

TINCTURA CHIRETTÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Chiretta, bruised - - 5oz. Proof Spirit - - - 2 pints. Macerate for 14 days; strain, express, and filter.

TINCTURA CINCHONÆ.

LONDON.	EDINBURGH.	DUBLIN.
Yellow Cinchona Bark, bruised 8oz. Proof Spirit - - - 2 pints. Macerate for 7 days; then press and strain.	Yellow Bark, in fine powder 8oz. Proof Spirit - - - 2 pints. Percolate the Bark with the Spirit, the Bark being previously moistened with a very little Spirit, left thus for 10 or 12 hours, and then firmly packed in the cylinder. This Tincture may also be prepared, though much less	*Vide* Tincture Cinchonæ Pallidæ.

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
	expeditiously, and with much greater loss, by the usual process of digestion, the Bark being in that case reduced to coarse powder only.	
	Any other species of Cinchona may be used, according to prescription.	

DOSE.—1 to 3 drachms. Tonic, stomachic.

TINCTURA CINCHONÆ COMPOSITA.

Pale Cinchona, bruised - 4oz.	Yellow Bark, in coarse powder 4oz.	Peruvian Bark, brown or pale, 4oz.
Orange Peel, dried - - 3oz.	Bitter Orange Peel, bruised 3oz.	Bitter Orange Peel, dried 2oz.
Serpentary Root, bruised ʒ vi.	Serpentaria, in moderately fine powder - - - - - ʒ vi.	Virginia Snake Root, bruised ʒ vi.
Saffron - - - - - - ʒ ii.	Saffron, chopped - - - ʒ ii.	Saffron, chopped fine - ʒ ii.
Cochineal, bruised - - ʒ i.	Cochineal, bruised - - ʒ i.	Cochineal, in powder - ʒ i.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	Digest for 7 days; strain and express strongly; filter the liquors. This Tincture may also be conveniently prepared by the method of percolation in the same way as the compound Tincture of Cardamom, but then the Bark must be finely powdered.	Macerate 14 days; strain, express, and filter.

The proportion of ingredients in all are alike, except that Dublin uses two-thirds only of the quantity of Orange Peel, and the Edinburgh *yellow* Bark, in the place of *pale* used by the other two.

DOSE.—1 to 3 drachms. Tonic, stomachic.

TINCTURA CINCHONÆ PALLIDÆ.

		Tinctura Cinchonæ.
Prepare this in the same manner as has been directed for Tincture of Cinchona.	There is no express formula given for this Tincture; but any species of Bark, according to prescription, is directed to be used.	Peruvian Bark, brown or pale, in coarse powder - - 8oz. Proof Spirit - - - 2 pints. Macerate for 14 days, strain, express, and filter.

All three alike.

DOSE.—1 to three drachms.

TINCTURA CINNAMOMI.

Cinnamon, bruised - 3½oz.	Cinnamon, finely bruised 3½oz.	Not in Pharm.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	
Macerate for 7 days; then press and strain.	Proceed by percolation or digestion, as directed for Tincture of Cassia.	

DOSE.—1 to 2 drachms.

LONDON. **EDINBURGH.** **DUBLIN.**

TINCTURA CINNAMOMI COMPOSITA.

		AVOIRDUPOIS WEIGHT.
Cinnamon, bruised - - 1oz.	Cinnamon, in coarse powder,	Cinnamon, bruised - - 2oz.
Cardamom Seeds, bruised ½oz.	Cardamom Seeds, bruised, of each 1oz.	Cardamom Seeds, bruised 1oz.
Long Pepper, powdered,	Long Pepper, ground finely ʒ iii.	
Ginger, bruised, of each ʒ iiss.		Ginger, bruised - - - ½oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	This Tincture is best prepared by the method of percolation, as directed for the compound Tincture of Cardamom. But it may also be made in the ordinary way by digestion for 7 days, straining and expressing the liquor, and then filtering it.	Macerate for 14 days; strain, express, and filter.

London and Edinburgh are nearly alike, and are only half the strength of Dublin.

DOSE.—1 to 2 drachms.—LOND. and EDIN. 30 to 60 minims.—DUBLIN.

TINCTURA COCCI CACTI.

Not in Pharm.	Not in Pharm.	Cochineal, in fine powder 2oz.
		Proof Spirit - - - 1 pint.
		Macerate for 14 days; strain, express, and filter.

TINCTURA COLCHICI.

		Tinctura Seminum Colchici.
Meadow Saffron Seeds, bruised 5oz.	Colchicum Seeds, ground finely 5oz.	Colchicum Seeds, bruised 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	This Tincture is to be prepared like the Tincture of Cinchona; and percolation is much more convenient and speedy than digestion.	Macerate for 14 days; strain, express, and filter.

All three alike.

DOSE.—20 to 30 minims, in rheumatism and gout.

TINCTURA COLCHICI COMPOSITA.

Meadow Saffron Seeds, bruised 5oz.	Not in Pharm.	Not in Pharm.
Aromatic Spirit of Ammonia 2 pints.		
Macerate for 7 days; then press and strain.		

TINCTURA CONII.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Dried Hemlock Leaves - 5oz. Proof Spirit - - - 2 pints.	Fresh Leaves of Conium 12oz. Tincture of Cardamom ½ pint. Rectified Spirit - - 1½ pint.	Not in Pharm.
Macerate for 7 days; then press and strain.	Bruise the Hemlock Leaves, express the juice strongly; bruise the residuum, pack it firmly in a percolator; transmit first the Tincture of Cardamom, and then the Rectified Spirit, allowing the spiritous liquors to mix with the expressed juice as they pass through; add gently water enough to the percolator for pushing through the spirit remaining in the residuum. Filter the liquor after agitation.	

The Cardamoms are very properly left out of the London formula. Dried Hemlock is not always good, and the Cardamoms completely masked the inferior kind.

DOSE.—Half a drachm to a drachm. Narcotic.

TINCTURA CROCI.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Saffron, chopped fine - 2oz. Proof Spirit - - - 2 pints.	Saffron, chopped fine - 2oz. Proof Spirit - - - 1 pint.
	This Tincture is to be prepared like Tincture of Cinchona, either by percolation or by digestion, the former method being the more convenient and expeditious.	Macerate for 14 days, strain, express and filter.
	Edinburgh half the strength of Dublin.	
	DOSE.—1 to 2 drachms.—EDIN.	

TINCTURA CUBEBÆ.

LONDON.	EDINBURGH.	DUBLIN.
Cubebs, bruised - - - 1 lb. Proof Spirit - - - 2 pints.	Not in Pharm.	Cubebs, bruised - - - 5oz. Rectified Spirit - - 2 pints.
Macerate for 7 days; then press and strain.		Macerate for 14 days; strain, express, and filter.

The London Pharm. 1836, had the same formula as the Dublin. It is now more than doubled, using Proof Spirit in the place of Rectified.

DOSE.—1 to 2 drachms.—DUBLIN.

TINCTURA CUSPARIÆ. Vel Angostura

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Cusparia, in moderately fine powder - - - - 4½oz. Proof Spirit - - - 2 pints.	Not in Pharm.
	This Tincture is to be made like the Tincture of Cinchona, and most expeditiously by the process of percolation.	
	DOSE.—1 to 2 drachms.	

TINCTURA DIGITALIS.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Dried Foxglove Leaves - 4oz.	Digitalis, in moderately fine powder - - - - - 4oz.	Foxglove Leaves, dried, in coarse powder - - - 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	This Tincture is best prepared by the process of percolation, as directed for the Tincture of Capsicum. If 40 fluid ounces of Spirit be passed through, the density is ·944, and the solid contents of a fluid ounce amount to 24 grains. It may also be made by digestion.	Macerate for 14 days; strain, express, and filter.

Dublin rather stronger than London and Edinburgh.

DOSE.—As a diuretic, 20 to 30 minims.

REMARKS.—Mr. Webber of Norwich prescribes Tincture of Digitalis in the following manner. He commences with 1 fluid drachm, and in four hours gives 2 fluid drachms; and if the pulse be not diminished below the natural standard in four hours more, either 3 or 4 fluid drachms are given; and should this not produce the effect desired, 5 to 6 drachms may be given, until the sixth dose; should the sixth fail, it may be abandoned. When the medicine is given in such very large doses, it is of paramount importance to strap the patient down in bed, because the embarrassment often induces an effort to rise, which might cause fatal fainting. As soon as the full effect is perceived, stimulants, such as brandy and water, may be given ad libitum, without fear of producing reaction beyond the natural standard.

TINCTURA ERGOTÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Ergot of Rye, in coarse powder 8oz.
		Proof Spirit - - - 2 pints.
		Macerate for 14 days; strain, express, and filter.

DOSE.—10 minims to a drachm.

TINCTURA ERGOTÆ ÆTHEREA.

LONDON.	EDINBURGH.	DUBLIN.
Ergot, bruised - - - 15oz.	Not in Pharm.	Not in Pharm.
Ether - - - - - - 2 pints.		
Macerate for 7 days; then press and strain.		

Now introduced. **DOSE.**—10 minims.

TINCTURA FERRI ACETATIS.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Sulphate of Iron - - 8oz.
		Distilled Water - - ½ pint.
		Pure Sulphuric Acid - fl. ʒ vi.
		Pure Nitric Acid - ½ fl. oz.
		Acetate of Potash - - 8oz.
		Rectified Spirit - ½ gallon.
		To 9oz. of water add the Sulphuric Acid, and in the mixture with the aid of heat, dissolve the Sulphate of Iron. Add next the Nitric Acid, first diluted with the remaining ounce of water, and eva-

LONDON.	EDINBURGH.	DUBLIN.
	CONTINUED.	AVOIRDUPOIS WEIGHT.
		porate the resulting solution to the consistence of a thick syrup. Dissolve this in one quart, and the Acetate of Potash in the remainder of the Spirit, and having mixed the solutions, and shaken the mixture repeatedly in a large bottle, let the whole be thrown upon a calico filter. When any further liquid ceases to trickle through, subject the filter with its contents to expression, and having cleared the turbid Tincture thus procured by filtration through paper, let it be added to that already obtained.
		(Sp. Gr. ·891.)

DOSE.—30 to 60 minims.

TINCTURA FERRI AMMONIO-CHLORIDI.

LONDON.	EDINBURGH.	DUBLIN.
Ammonio-chloride of Iron 4oz. Proof Spirit, Distilled Water, of each ½ pint.	Not in Pharm.	Not in Pharm.
Dissolve and filter.		
Potash added to a fluid ounce of this Tincture, throws down 5·8 grains of Sesquioxide of Iron.		

It may be well to draw attention to the fact, that a fluid ounce contains only one-fifth part of the iron that is contained in the Tinct. Ferri Sesquichloridi.

DOSE.—1 to 2 drachms.

TINCTURA FERRI SESQUICHLORIDI.

Tinctura Ferri Muriatis.

LONDON.	EDINBURGH.	DUBLIN.
Sesquioxide of Iron - - 6oz. Hydrochloric Acid - 1 pint.	Red Oxide of Iron - - 6oz. Muriatic Acid, Commercial 1 pint.	Iron Wire - - - - 8oz. Pure Muriatic Acid - 1 quart.
Rectified Spirit - - 3 pints.	Rectified Spirit - - 3 pints.	Rectified Spirit - - 1½ pint. Pure Nitric Acid - 18 fl. oz. Distilled Water - - 1 pint.
Mix the Sesquioxide with the Acid, and digest in a sand bath, frequently shaking, until it be dissolved. Then to the cold solution add the spirit, and strain. Potash added to a fluid ounce, throws down nearly 30 grains of Sesquioxide of Iron.	Add the Oxide to the Acid in a glass vessel; digest with a gentle heat, and occasional agitation, for a day, or till most of the Oxide be dissolved; then add the Spirit and filter.	Dilute the Muriatic Acid with the water, and, having poured the mixture on the Iron, apply a gentle heat until the metal is dissolved. Next add the Nitric Acid in successive portions, and then evaporate at a gentle heat until the solution is reduced to 1 pint. Finally, mix this in a bottle with the spirit, and after the mixture has stood for 12 hours, draw off the clear Tincture.
(Sp. Gr. ·992.)		(Sp. Gr. 1·237.)

CONTINUED.

London and Edinburgh alike; Dublin is about two and a half times stronger than either of them.

DOSE of London and Edinburgh, 10 to 60 minims, as a tonic; and perhaps the most to be relied on of all the preparations of Iron.

INCOMPATIBLES.—Alkalies and their Carbonates, Lime Water, Carbonate of Lime, Magnesia and its Carbonate. Astringent Vegetables render it black, and Mucilage decomposes it.

TINCTURA GALLÆ.

		AVOIRDUPOIS WEIGHT.
Galls, bruised - - - 5oz.	Galls, in fine powder - 5oz.	Galls, in fine powder - 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	This Tincture may be prepared either by digestion or percolation, as directed for Tincture of Capsicum.	Macerate for 14 days; strain, express and filter.

It should not be kept too long made, as it is apt to undergo change.

DOSE.—Half a drachm to 2 drachms. Astringent.

TINCTURA GENTIANÆ COMPOSITA.

Gentian Root, sliced - 2½oz.	Gentian, sliced and bruised 2½oz.	Gentian Root, bruised - 3oz.
Orange Peel, dried - - ʒ x.	Dried Bitter Orange Peel, bruised - - - - - ʒ x.	Bitter Orange Peel, dried 1½oz.
Cardamom Seeds, bruised ʒ v.	Canella, in moderately fine powder - - - - ʒ vi.	Cardamom Seeds, bruised ½oz.
	Cochineal, bruised - - ʒ ss.	
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	Digest for 7 days; strain, and express strongly, and then filter the liquor. This Tincture may be more conveniently prepared by percolation, as directed for the Compound Tincture of Cardamom.	Macerate for 14 days; strain, express, and filter.

London and Dublin very nearly alike; Edinburgh containing Cochineal, and no Cardamoms, will appear a widely different preparation, and taste very differently, thus unnecessarily causing alarm and dilemmas in prescription.

DOSE.—1 to 2 drachms.

TINCTURA GUAIACI.

Not in Pharm.	Guaiac, in coarse powder 7oz.	Guaiac Resin, in fine powder, 8oz.
	Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.
	Digest for 7 days; and then filter the liquor.	Macerate for 14 days; strain, express, and filter.

Edinburgh and Dublin of the same strength.

DOSE.—1 to 3 drachms. Stimulant and Diaphoretic.

INCOMPATIBLES.—Same as for the Tinct. Guaiaci Comp.

TINCTURA GUAIACI COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
	Tinctura Guaiaci Ammoniata.	AVOIRDUPOIS WEIGHT. Not in Pharm.
Guaiacum Resin, coarsely powdered - - - - - 7oz.	Guaiac, in coarse powder 7oz.	
Aromatic Spirit of Ammonia, 2 pints.	Spirit of Ammonia - 2 pints.	
Macerate for 7 days, and strain.	Digest for 7 days in a well closed vessel; and then filter the liquor.	

* London is a Spirit of Carbonate of Ammonia; Edinburgh of pure Ammonia.

DOSE.—Half a drachm to 1 drachm, either with Mucilage or Yolk of Egg. Stimulant, Diaphoretic.

INCOMPATIBLES.—Acids, Acidulous, Earthy, or Metallic Salts.

TINCTURA HELLEBORI.

Hellebore Root, bruised 5oz.	Not in Pharm.	Not in Pharm.
Proof Spirit - - - 2 pints.		
Macerate for 7 days; then press, and strain.		

DOSE.—Half a drachm to a drachm. Emmenagogue.

This Tincture has been retained in the London Pharmacopœias of 1720, 1745, 1788, 1809, 1824, and 1836.

TINCTURA HYOSCYAMI.

Dried Henbane Leaves 5oz.	Hyoscyamus, dried - - 5oz.	Henbane Leaves, dried 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press, and strain.	This Tincture is best prepared by the process of percolation, as directed for Tincture of Capsicum; but it may also be obtained, though with greater loss, by the process of digestion.	Macerate for 14 days; strain, express, and filter.

London and Edinburgh alike; Dublin a little weaker.

DOSE.—Half a drachm to 2 drachms. Narcotic.

TINCTURA JALAPÆ.

Jalap Root, coarsely powdered, 5oz.	Jalap, finely bruised - 7oz.	Jalap Root, in coarse powder, 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 1½ pint.
Macerate for 7 days; then press, and strain.	This Tincture may be prepared either by digestion or percolation, as directed for Tincture of Cinchona.	Macerate for 14 days; strain, express, and filter.

London had 10oz., but now has 5oz.; Edinburgh, 7oz.; Dublin, 6oz. (troy) of root to each quart of Proof Spirit.

DOSE.—2 to 4 drachms. Cathartic, generally given in combination.

TINCTURA IODINEI.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Iodine - - - - - 2½oz. Rectified Spirit - - 2 pints. Dissolve the Iodine in the Spirit with the aid of a gentle heat and agitation; keep the Tincture in well-closed bottles.	AVOIRDUPOIS WEIGHT. Not in Pharm.

Each fluid ounce contains 30 grains.

DOSE.—5 to 20 minims.

TINCTURA IODINII COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
Iodine - - - - - - 1oz. Iodide of Potassium - 2oz. Rectified Spirit - - 2 pints. Macerate until the ingredients are dissolved, and strain.	Not in Pharm. The Liquor Iodinii Compositus is nearly as strong as these preparations.	Pure Iodine - - - - ½oz. Iodide of Potassium - 1oz. Rectified Spirit - - 1 pint. Dissolve the Iodine and Iodide of Potassium in the Spirit.

London and Dublin alike.

DOSE.—10 to 30 minims.

TINCTURA KINO.

LONDON.	EDINBURGH.	DUBLIN.
Powdered Kino - - 3½oz. Rectified Spirit - - 2 pints. Macerate for 7 days; and strain.	Powdered Kino - - 3½oz. Rectified Spirit - - 2 pints. Digest for 7 days, and then filter. This Tincture cannot be conveniently prepared by the process of percolation.	Not in Pharm.

London and Edinburgh alike.

DOSE.—1 to 2 drachms. Astringent.

TINCTURA KRAMERIÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Rhatany Root, in coarse powder - - - - - - 8oz. Proof Spirit - - - 2 pints. Macerate for 14 days; strain, express, and filter.

DOSE.—1 to 2 drachms. Astringent. Tonic.

TINCTURA LACTUCARII.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Lactucarium, in fine powder, 4oz. Proof Spirit - - - 2 pints. This Tincture is best prepared by percolation, as directed for Tincture of Myrrh; but may also be prepared by digestion with coarse powder of Lactucarium.	Not in Pharm.

DOSE.—1 to 3 drachms. Anodyne.

TINCTURA LAVANDULÆ COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
	Spiritus Lavandulæ Compositus.	AVOIRDUPOIS WEIGHT.
Oil of Lavender - fl. ʒ iss.	Spirit of Lavender - 2 pints.	Oil of Lavender - - fl. ʒ iii.
Oil of Rosemary - 10 minims.	Spirit of Rosemary 12 fl. oz.	Oil of Rosemary - - fl. ʒi.
Cinnamon, bruised,	Cinnamon, bruised - - 1oz.	Cinnamon, bruised - - 1oz.
Nutmeg, bruised, of each ʒiiss.	Nutmeg, bruised - - ½oz.	Nutmeg, bruised - - ½oz.
Red Saunders Wood, cut up, ʒ v.	Red Sandal Wood, in shavings, ʒ iii.	Cochineal, in powder,
Rectified Spirit - - 2 pints.	Cloves, bruised - - - ʒii.	Cloves, bruised, of each - ʒ ii.
		Rectified Spirit - - 2 pints.
Macerate the Cinnamon, Nutmeg, and Red Saunders in the Spirit for 7 days; then press and strain, and dissolve the Oils in the strained Tincture.	Let the whole macerate for 7 days; and then strain the liquor through calico.	Macerate for 14 days; strain, express, and filter.

The Oils of Lavender and Rosemary represent the power of the spirits of these herbs, which were before ordered in the London.

The Edinburgh and Dublin are the nearest alike. Dublin, however, prefers the Cochineal to Saunders. The London is weaker in the Spices and Essential Oils.

DOSE.—Half a drachm to 2 drachms. Stomachic, Stimulant.

TINCTURA LIMONUM.

Fresh Lemon Peel - 3½oz.	Not in Pharm.	Fresh Lemon Peel, cut thin, 5oz.
Proof Spirit - - - 2 pints.		Proof Spirit - - - 1 pint.
Macerate for 7 days; then press and strain.		Macerate for 14 days; strain express and filter.

The London College has introduced the preparation already found in the Dublin; it would doubtless have kept better if it had been made of the same strength, and we should have had the advantage of uniformity.

DOSE.—1 to 2 drachms.

TINCTURA LOBELIÆ.

Indian Tobacco, powdered, 5oz.	Lobelia, dried and powdered, 5oz.	Lobelia, dried and powdered, 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	This Tincture is best prepared by the process of percolation.	Macerate for 14 days; strain, express, and filter.

All three uniform in strength.

DOSE.—1 to 2 drachms as an antispasmodic. 4 drachms as an emetic.

TINCTURA LOBELIÆ ÆTHEREA.

Indian Tobacco, powdered, 5oz.	Lobelia, dried and powdered 5oz.	Not in Pharm.
Ether - - - - - 14 fl. oz.	Spirit of Sulphuric Ether 2 pints.	
Rectified Spirit - - 26 fl. oz.		
Macerate for 7 days; then press and strain.	This Tincture is best prepared by percolation, as directed for Tincture of Capsicum; but it may be also obtained by digestion in a well-closed vessel for 7 days.	

London and Edinburgh of the same strength.

DOSE.—1 to 2 drachms. Antispasmodic.

TINCTURA LUPULI.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT. *Tinctura Lupulinæ.*
Hops - - - - - - 6oz.	Hops, recently dried, any convenient quantity.	Lupulin - - - - - 5oz.
Proof Spirit - - - 2 pints.		Rectified Spirit - - 2 pints.
Macerate for 7 days; then press and strain.	Separate by friction and sifting the yellowish-brown powder attached to their scales. Then take of this powder 5oz. Rectified Spirit, 2 pints; and prepare the Tincture by percolation or digestion, as directed for Tincture of Capsicum.	Macerate for 14 days; strain, express, and filter.

The London Tincture is made of the Strobiles. The Edinburgh and Dublin of the Lupulin.

The former is very bitter, but the latter two are intensely so.

DOSE.—Of London, 1 to 3 drachms. Edinburgh and Dublin, half a drachm to a drachm.

TINCTURA MATICO.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Matico Leaves, in coarse powder - - - - - - 8oz.
		Proof Spirit - - - 2 pints.
		Macerate for 14 days; strain, express, and filter.

DOSE.—1 to 2 drachms. Astringent, useful in catarrh of the bladder of the aged.—Dr. NELIGAN.

TINCTURA MYRRHÆ.

LONDON.	EDINBURGH.	DUBLIN.
Powdered Myrrh - - 3oz.	Powdered Myrrh - - 3½oz.	Myrrh, in coarse powder 4oz.
Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.
Macerate for 7 days; and strain.	Pack the Myrrh very gently, without any spirit, in a percolator; then pour on the Spirit; and when 33 fluid ounces have passed through, agitate well, to dissolve the oleo-resinous matter which first passes, and which lies at the bottom. This Tincture is much less conveniently obtained by the process of digestion for 7 days.	Macerate for 14 days; strain, express, and filter.

London, 1½oz. Edinburgh, 1¾oz., and Dublin, 2oz. to the pint of rectified Spirit.

DOSE.—From half a drachm to 2 drachms. Tonic. Deobstruent.

TINCTURA OPII.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Powdered Opium - - 3oz. Proof Spirit - - - 2 pints.	Opium, sliced - - - 3oz. Rectified Spirit - 27 fl. oz. Water - - - - 13½ fl. oz.	Opium, in coarse powder 3oz. Proof Spirit - - - 2 pints.
Macerate for 7 days; then press, and strain.	The process being a long one, is placed in the Appendix.	Macerate for 14 days; strain, express, and filter.

All of the same strength.

One grain of Powdered Opium is employed to produce 13 minims of Tinct. Opium. The way in which the quantity of Opium in the Tincture has been ascertained, by evaporating the Tincture, and finding 19 minims yield a grain, is, I think, fallacious, for the Extract so obtained is reckoned as Opium, which is not the case, for Opium contains impurities which are insoluble.

DOSE.—15 to 30 minims. Narcotic.

TINCTURA OPII AMMONIATA.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Opium, sliced - - - ½oz. Benzoic Acid, Saffron, chopped, of each ʒ vi. Oil of Anise - - - - ʒi. Spirit of Ammonia - 2 pints. Digest for 7 days; and then filter.	Not in Pharm.

This is called the Scotch Paregoric, and ought to be made with Caustic Spirit of Ammonia, the old Spiritus Ammoniæ of P. L. being a carbonate, would precipitate all the Morphia.

One grain of Opium in 80 minims. **DOSE.**—Half a drachm to 2 drachms.

TINCTURA OPII CAMPHORATA.

Vide Tinctura Camphoræ Composita.

TINCTURA QUASSIÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Quassia, in chips - - ʒx. Proof Spirit - - - 2 pints. Digest for 7 days; and then filter.	Not in Pharm.

DOSE.—1 to 4 drachms. Bitter. Tonic febrifuge.

TINCTURA QUASSIÆ COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Quassia, in chips, Cinnamon, in moderately fine powder - - of each ʒvi. Cardamom Seeds, bruised, Cochineal, bruised, of each ½oz. Raisins - - - - - - - 7oz. Proof Spirit - - - 2 pints. Digest for 7 days; strain the liquor; express strongly the residuum, and filter. This Tincture may also be obtained by percolation, as directed for Compound Tincture of Cardamom, provided the Quassia be rasped or in powder.	Not in Pharm.

DOSE.—1 to 4 drachms.

TINCTURA QUINÆ COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Disulphate of Quinine ʒ v. and ℈i.	Not in Pharm.	Not in Pharm.
Tincture of Orange - 2 pints.		
Digest for 7 days, or until the Quinine be dissolved; and strain.		

The College have introduced this Tincture;—a similar one with Sulphuric Acid has been long in use, but the Disulphate being found almost entirely soluble in Tincture of Orange, the Acid has been omitted; I find by experiment that in 7 days 39-40ths are dissolved.

Every fluid drachm contains about 1 grain.

DOSE.—1 to 3 drachms. Tonic. Stomachic.

TINCTURA RHEI COMPOSITA.

	Tinctura Rhei.	
Rhubarb, sliced - - 2½oz.	Rhubarb, in moderately fine powder - - - - 3½oz.	Rhubarb Root, bruised - 3oz.
Fresh Liquorice Root, bruised, ʒ vi.		Liquorice Root, bruised ½oz.
Ginger, bruised, Saffron - - - of each ʒ iii.	Cardamom Seeds, bruised ½oz.	Cardamom Seeds, bruised, 1oz. Saffron, chopped fine - ʒ ii.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	Mix the Rhubarb and Cardamom Seeds, and proceed by the process of percolation, as directed for Tincture Cinchona. This Tincture may be prepared also by digestion.	Macerate for 14 days; strain, express, and filter.

All three differ in ingredients and strength.

DOSE.—2 to 8 drachms, as a tonic and mild laxative.

TINCTURA RHEI ET ALÖES.

Not in Pharm.	Rhubarb, in moderately fine powder - - - - 1½oz.	Not in Pharm.
	Socotrine, or East India Aloes, in moderately fine powder ʒ vi.	
	Cardamom Seeds, bruised ʒ v.	
	Proof Spirit - - - 2 pints.	
	Mix the powders, and proceed as for the Tincture of Cinchona.	

DOSE.—Half an ounce to an ounce, as a purgative.

TINCTURA RHEI ET GENTIANÆ.

Not in Pharm.	Rhubarb, in moderately fine powder - - - - - 2oz.	Not in Pharm.
	Gentian, finely cut, or in coarse powder - - - - - ½oz.	
	Proof Spirit - - - 2 pints.	
	Mix the powders, and proceed as directed for Tincture of Cinchona.	

DOSE.—1 to 2 drachms.

TINCTURA SCILLÆ.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Squill, recently dried - 5oz.	Squill, in coarse powder - 5oz.	Squill, in coarse powder - 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	Prepare the Tincture by percolation, as directed for Tincture of Cinchona, but without packing the pulp firmly in the percolator. It may likewise be obtained by digestion from the sliced bulb.	Macerate for 14 days; strain, express and filter.

All three alike.

DOSE.—10 to 30 minims. Expectorant, diuretic.

TINCTURA SENNÆ COMPOSITA.

LONDON.	EDINBURGH.	DUBLIN.
Senna Leaves - - - 3½oz.	Senna - - - - - - 4oz.	Senna - - - - - - 4oz.
Caraway Seeds, bruised, ʒ iiiss.	Caraway, bruised,	Caraway Seeds, bruised,
Cardamom Seeds, bruised, ʒ i.	Cardamom Seeds, bruised of each ʒ v.	Cardamom Seeds, bruised, of each ½oz.
Raisins, stoned - - - 5oz.	Raisins, bruised - - - 4oz.	
Proof Spirit - - - 2 pints.	Jalap, in moderately fine powder - - - - - - ʒ vi.	Proof Spirit - - - 2 pints.
	Coriander, bruised - - 1oz.	
	Sugar - - - - - - 2½oz.	
	Proof Spirit - - - 2 pints.	
Macerate for 7 days; then press and strain.	Digest for 7 days; strain the liquor, express strongly the residuum, and filter the liquids. This Tincture may be more conveniently and expeditiously prepared by percolation, as directed for the Compound Tincture of Cardamom. If Alexandrian Senna be used for this preparation, it must be freed of Cynanchum Leaves by picking.	Macerate for 14 days; strain, express, and filter.

London contains only one-fifth the quantity of Cardamom of the Edin. form. It will be seen that the Edinburgh introduces Jalap and Coriander; the Dublin contains no raisins.

DOSE.—2 to 8 drachms. Stomachic, purgative.

TINCTURA SERPENTARIÆ.

LONDON.	EDINBURGH.	DUBLIN.
Serpentary Root, bruised, 3½oz.	Serpentaria, in moderately fine powder - - - - 3½oz.	Not in Pharm.
	Cochineal, bruised - - ʒ i.	
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	
Macerate for 7 days; then press and strain.	Proceed, by percolation or digestion, as for the Tincture of Cinchona.	

London and Edinburgh the same strength; the Cochineal would be as well omitted.

DOSE.—1 to 3 drachms. Tonic, diaphoretic.

Dyspepsia with languor & dry skin. Remittent & malignant Fevers, with sinking & heat of dry skin. Eruptive & pustular fevers which recede. And in protracted intermittents, especially, with cough. A. T. Thomson.

TINCTURA STRAMONII.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Not in Pharm.	Stramonium Seeds, bruised, 5oz.
		Proof Spirit - - - 2 pints.
		Macerate for 14 days; strain, express and filter.

DOSE.—10 to 30 minims.

TINCTURA TOLUTANA.

Balsam of Tolu - - - 2oz.	Tolu Balsam, in coarse powder 3½oz.	Balsam of Tolu - - - 2oz.
Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.	Rectified Spirit - - 1 pint.
Macerate the Balsam until it be dissolved, and strain.	Digest the Balsam in the Spirit, with a gentle heat, till it is dissolved.	Dissolve the Balsam in the Spirit, with the aid of a gentle heat, let it stand until the sediments subside; then decant the clear Tincture.

Dublin and Edinburgh are nearly twice the strength of the London College.

DOSE of London 10 to 30 minims.

TINCTURA VALERIANÆ.

Valerian Root, bruised - 5oz.	Valerian, bruised - - 5oz.	Valerian Root, bruised - 5oz.
Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.	Proof Spirit - - - 2 pints.
Macerate for 7 days; then press and strain.	Proceed by percolation or digestion, as for Tincture of Cinchona.	Macerate for 14 days; strain. express, and filter.

All three alike.

DOSE.—1 to 3 drachms. Antispasmodic.

TINCTURA VALERIANÆ COMPOSITA.

	Tinct. Valer. Ammoniata.	
Valerian Root, bruised - 5oz.	Valerian, bruised - - 5oz.	Not in Pharm.
Aromatic Spirit of Ammonia 2 pints.	Spirit of Ammonia - 2 pints.	
Macerate for 7 days; then press and strain.	Proceed by percolation, or by digestion, in a well-closed vessel, as directed for Tincture of Cinchona.	

Strength the same; simple Caustic Spirit of Ammouia being used in the Edinburgh.

DOSE.—Half a drachm to a drachm. Antispasmodic.

TINCTURA ZINGIBERIS.

Ginger, bruised - - 2½oz.	Ginger, in coarse powder 2½oz.	Ginger Root, in coarse powder 8oz.
Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.	Rectified Spirit - - 2 pints.
Macerate for 7 days; then press and strain.	Proceed by percolation or digestion, as directed for Tincture of Cinchona.	Macerate for 7 days; strain express, and filter.

London and Edinburgh alike. Dublin have increased the quantity of their former Pharmacopœia, which was little more than 3 ounces, to 8 ounces, making it very nearly three times the strength of the London and Edinburgh.

DOSE of London and Edinburgh, 1 to 2 drachms. Stimulant, carminative.

LONDON.	EDINBURGH.	DUBLIN.
	TROCHISCI ACACIÆ.	
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Gum-Arabic - - - - 4oz. Starch - - - - - - - 1oz. Pure Sugar - - - - 1 lb. Mix and pulverize them, and make them into a proper mass with Rose Water, for forming Lozenges.	Not in Pharm.
	TROCHISCI ACIDI TARTARICI.	
Not in Pharm.	Tartaric Acid - - - ʒii. Pure Sugar - - - - 8oz. Volatile Oil of Lemons 10 minims. Pulverize the Sugar and Acid, add the Oil, mix them thoroughly, and with Mucilage beat them into a proper mass for making Lozenges.	Not in Pharm.
	TROCHISCI CRETÆ.	
Not in Pharm.	Prepared Chalk - - - 4oz. Gum-Arabic - - - - 1oz. Nutmeg - - - - - ʒi. Pure Sugar - - - - 6oz. Reduce them to powder, and beat them with a little water into a proper mass for making Lozenges.	Not in Pharm.
	TROCHISCI GLYCYRRHIZÆ.	
Not in Pharm.	Extract of Liquorice, Gum Arabic, of each 6oz. Pure Sugar - - - - 1lb. Dissolve them in a sufficiency of boiling water; and then concentrate the solution over the vapour bath to a proper consistence for making Lozenges.	Not in Pharm.
	TROCHISCI LACTUCARII.	
Not in Pharm.	To be prepared with Lactucarium in the same proportion, and in the same manner, as the Opium Lozenge.	Not in Pharm.

TROCHISCI MAGNESIÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Carbonate of Magnezia - 6oz. Pure Sugar - - - - 3oz. Nutmeg - - - - - ℈i. Pulverize them, and with Mucilage of Tragacanth, beat them into a proper mass for making Lozenges.	AVOIRDUPOIS WEIGHT. Not in Pharm.

TROCHISCI MORPHIÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Muriate of Morphia - - ℈i. Tincture of Tolu - - ½oz. Pure Sugar - - - - 25oz. Dissolve the Muriate of Morphia in a little hot water; mix it and the Tincture of Tolu with the Sugar; and with a sufficiency of Mucilage form a proper mass for making Lozenges; each of which should weigh about 15 grains.	Not in Pharm.

TROCHISCI MORPHIÆ ET IPECACUANHÆ.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Muriate of Morphia . - ℈i. Ipecacuan, in fine powder ʒi. Tincture of Tolu - - ½ fl. oz. Pure Sugar - - - - 25oz. Dissolve the Muriate in a little hot water; mix it with the Tincture and the Ipecacuan and Sugar; and with a sufficiency of Mucilage beat the whole into a proper mass, which is to be divided into 15 grain Lozenges.	Not in Pharm.

TROCHISCI OPII.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Opium - - - - - - ʒii. Tincture of Tolu - ½ fl. oz. Pure Sugar, in fine powder, 6oz. Powder of Gum Arabic, Extract of Liquorice, of each 5oz. Reduce the Opium to a fluid Extract as directed under "Extractum Opii;" mix it intimately with the Liquorice previously reduced to the consistence of treacle; add the Tincture; sprinkle the Gum and Sugar into the mixture, and beat it into a proper mass, which is to be divided into Lozenges of 10 grains.	Not in Pharm.

LONDON.	EDINBURGH.	DUBLIN.

TROCHISCI SODÆ BICARBONATIS.

AVOIRDUPOIS WEIGHT.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Bicarbonate of Soda - 1oz. Pure Sugar - - - - 3oz. Gum-Arabic - - - - ½oz.	Not in Pharm.
	Pulverize them, and with Mucilage beat them into a proper mass for making Lozenges.	

UNGUENTUM ÆRUGINIS.

LONDON.	EDINBURGH.	DUBLIN.
		Unguentum Cupri Subacetatis.
Not in Pharm.	Resinous Ointment - 15oz.	Prepared Subacetate of Copper ʒss.
	Verdigris, in fine powder 1oz.	Ointment of White Wax ʒ viiss.
	Melt the Ointment, sprinkle into it the powder of Verdigris, and stir the mixture briskly as it cools and concretes.	Triturate the Subacetate of Copper with the Ointment until they are intimately mixed.

USE.—A mild caustic, applied to venereal ulcers of the mouth and tonsils, and to the ulcerated throat in scarletina.

UNGUENTUM ANTIMONII POTASSIO-TARTRATIS.

LONDON.	EDINBURGH.	DUBLIN.
	Unguentum Antimoniale.	*Unguentum Antimonii Tartarizati.*
Potassio-Tartrate of Antimony, rubbed to very fine powder 1oz. Lard - - - - - - 4oz.	Tartar-Emetic, in very fine powder - - - - - 1oz. Axunge - - - - - 4oz.	Tartar-Emetic, in very fine powder - - - - - ʒi. Ointment of White Wax ʒ vii.
Rub together.	Triturate them carefully together into a smooth and uniform mass.	Triturate the powder with the Ointment in a mortar, until they are intimately mixed.

London and Edinburgh alike ; Dublin half the strength.

UNGUENTUM BELLADONNÆ.

LONDON.	EDINBURGH.	DUBLIN.
Extract of Belladonna - ʒi. Lard - - - - - - ʒi.	Not in Pharm.	Not in Pharm.
Rub together.		

UNGUENTUM CANTHARIDIS.

LONDON.	EDINBURGH.	DUBLIN.
Cantharides, reduced to very fine powder - - - 3oz. Distilled Water - 12 fl. oz. Resin Cerate - - - - 1 lb.	Cantharides, in very fine powder 1oz. Resinous Ointment - - 7oz.	Liniment of Spanish Flies 8 fl. oz. White Wax - - - - 3oz. Spermaceti - - - - 1oz.
Boil the water with the Cantharides down to one-half, and strain. Mix the Cerate with the strained liquor ; and afterwards let it evaporate to a proper consistence	Melt the Ointment; sprinkle into it the Cantharides powder; and stir the mixture briskly as it concretes on cooling.	Melt the Wax and Spermaceti in the Oil, with a gentle heat, and stir the mixture constantly until it concretes.

These will all differ widely in appearance, and Edinburgh the most, the Cantharides being in powder. The Ung. Infusi Cantharidis is more like these preparations. The Dublin solution in *oil* is equal to 2 ounces, whilst the London in *water* is 3 ounces. It is difficult to say which process answers best.

Employed to promote discharge from a blistered surface.

UNGUENTUM INFUSI CANTHARIDIS.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Cantharides, in moderately fine powder, Resin, Bees' Wax - - of each 1oz. Venice Turpentine, Axunge, - - - of each 2oz. Boiling Water - - 5 fl. oz. Infuse the Cantharides in the water for one night, squeeze strongly, and filter the expressed liquid. Add the Axunge, and boil till the water is dispersed. Then add the Wax and Resin: and when these have become liquid, remove the vessel from the fire, add the Turpentine, and mix the whole thoroughly.	AVOIRDUPOIS WEIGHT. Not in Pharm.

UNGUENTUM CERÆ ALBÆ.

Not in Pharm.	Not in Pharm.	White Wax - - - - 1 lb. Prepared Lard - - - 4 lb. Melt them together with a gentle heat, and stir constantly until the mixture concretes.

The Dublin College has made this the vehicle for all ointments where it can be employed, thus shewing at a glance the relative proportions of active matter and its vehicle,—a step in the right direction.

UNGUENTUM CETACEI.

Spermaceti - - - - 5oz. White Wax - - - ℥xiv. Olive Oil - - 1 pint or q. s. Being all melted together over a slow fire, stir constantly until they become cold.	Not in Pharm.	Spermaceti - - - - 1 lb. White Wax - - - - ½ lb. Prepared Lard - - - 3 lb. Melt them together with a gentle heat, and stir constantly until cold.

A soft cool dressing, applied on lint.

UNGUENTUM CITRINUM.

Vide Unguentum Hydrargyri Nitratis.

UNGUENTUM COCCULI.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Take any convenient quantity of Cocculus Indicus, separate and preserve the kernels, beat them well in a mortar, first alone, and then with a little Axunge; and then add Axunge, till it amounts altogether to five times the weight of the kernels.	Not in Pharm.

USE.—One of the best applications for the treatment of ring-worm of the scalp. It should be applied night and morning, and washed away with soap and water at least once a day.—Dr. CHRISTISON.

UNGUENTUM CONII.

Fresh Hemlock Leaves, Lard - - - - of each 1 lb. Boil the Hemlock in the Lard, until it becomes crisp; then press through linen.	Not in Pharm.	Not in Pharm.

This is now introduced. Van Mons (1817) has an ointment of juice and lard. This may answer as well or better as an application for Carcinomatous, scrofulous, and phagedænic ulcers.

UNGUENTUM CREASOTI.

Creasote - - - - fl. ʒ ss. Lard - - - - - - - 1oz. Rub together.	Creasote - - - - - - fl. ʒi. Axunge - - - - - - 3oz. Melt the Axunge, add the Creasote, stir them briskly, and continue to do so as the mixture concretes on cooling.	Creasote - - - - fl. ʒi. Ointment of White Wax ʒ vii. To the Ointment, liquified by a moderate heat, add the Creasote, and stir constantly until the mixture concretes.

It will be seen that Edinburgh employs 1 scruple, London half a drachm, and Dublin 1 drachm, to an ounce.

USE.—Employed in mild cases of ring-worm.

UNGUENTUM CUPRI SUBACETATIS.

Vide Unguentum Æruginis.

UNGUENTUM ELEMI.

Elemi - - - - - - - 3oz. Turpentine - - - 2½ oz. Suet - - - - - - - 6oz. Olive Oil - - - - ½ fl. oz. Melt the Elemi with the suet, then remove them from the fire, and immediately mix with the Turpentine and Oil; afterwards press through a linen cloth.	Not in Pharm.	Resin of Elemi - - - 4oz. Ointment of White Wax 1 lb. Melt them together, strain through flannel, and stir the mixture constantly until it concretes.

London the strongest stimulant.

USE.—To keep open issues and setons.

UNGUENTUM GALLÆ COMPOSITUM.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
	Unguentum Gallæ et Opii.	*Ung. Gallæ.*
Galls, very finely powdered ʒ vi.	Galls, in fine powder - ʒ ii.	Galls, in fine powder - ʒ i.
Powdered Opium - - ʒ iss.	Opium, in powder - - ʒ i.	Ointment of White Wax ʒ vii.
Lard - - - - - - - 6oz.	Axunge - - - - - - 1oz.	
Rub together.	Triturate them together into a uniform mass.	Rub the powdered Galls with the Ointment until a uniform mixture is obtained.

These having different names, are nevertheless brought under one head for comparison; and it will be seen the London and Dublin are of the same strength, the latter omitting the Opium; Edinburgh twice that of the others.

USE.—Astringent. Used in hæmorrhoidal affections.

UNGUENTUM HYDRARGYRI.

LONDON.	EDINBURGH.	DUBLIN.
Unguentum Hydrargyri Fortius—Pharm. 1836.		
Mercury - - - - - - 1 lb.	Mercury - - - - - - 2 lb.	Pure Mercury,
Lard - - - - - - - 11½oz.	Axunge - - - - - - 23oz.	Prepared Lead, - of each 1 lb.
Suet - - - - - - - ½oz.	Suet - - - - - - - 1oz.	
Rub the Mercury with the Suet and a little of the Lard, until the globules are no longer visible; then add the remaining Lard, and triturate all together.	Triturate the Mercury with the Suet and a little of the Axunge, till globules are no longer visible; then add the rest of the Axunge, and mix the whole thoroughly. This ointment is not well prepared, so long as metallic globules may be seen in it with a magnifier of four powers. The Mercurial Ointment, with the proportions here directed, may be diluted at pleasure with twice or thrice its weight of Axunge.	Rub them together, until metallic globules cease to be visible to the naked eye.

All three of one strength.

USE.—A prompt mode of introducing Mercury into the system; half a drachm to a drachm being rubbed into a part where the cuticle is thin.

UNGUENTUM HYDRARGYRI AMMONIO-CHLORIDI.

LONDON.	EDINBURGH.	DUBLIN.
	Unguentum Precipitati Albi.	Not in Pharm.
Ammonio-chloride of Mercury ʒ ii.	White Precipitate - - ʒ ii.	
Lard - - - - - - - 3oz.	Axunge - - - - - - 3oz.	
Add the Ammonio-chloride to the Lard, and rub them well together.	Melt the Axunge, add the White Precipitate, and stir the mixture briskly while it concretes on cooling.	

London and Edinburgh alike.

USE.—Stimulant and detergent.

UNGUENTUM HYDRARGYRI IODIDI.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Iodide of Mercury - - 1oz. White Wax - - - - 2oz. Lard - - - - - - - 6oz.	Not in Pharm.	Not in Pharm.
To the Wax and Lard liquified together, add the Iodide, and rub well together.		

USE.—Application for scrofulous sores.

UNGUENTUM HYDRARGYRI IODIDI RUBRI.

LONDON.	EDINBURGH.	DUBLIN.
Not in Pharm.	Not in Pharm.	Red Iodide of Mercury - ℥ i. Ointment of White Wax ℥ vii.
		Incorporate the Iodide of Mercury and Ointment by careful trituration in a mortar.

X London College has now discontinued to order this; it is very much more active than Ung. Hydr. Iodidi, and used for similar purposes.

UNGUENTUM HYDRARGYRI NITRATIS.

LONDON.	EDINBURGH.	DUBLIN.
	Unguentum Citrinum.	*Vel* *Unguentum Citrinum.*
Mercury - - - - - 2oz. Nitric Acid - - - 4 fl. oz. Lard - - - - - - - 1 lb. Olive Oil - - - - 8 fl. oz.	Mercury - - - - - 4oz. Pure Nitric Acid, 8 fl. oz. and fl. ℥ vii. Axunge - - - - - 15oz. Olive Oil - - - - 32 fl. oz.	Pure Mercury - - - 1oz. Pure Nitric Acid - 1 fl. oz. Prepared Lard - - - 4oz. Olive Oil - - - - 8 fl. oz. Distilled Water - - ½ fl. oz.
Dissolve the Mercury in the Acid, then mix the liquor, still hot, with the Lard and Oil melted together.	Dissolve the Mercury in the Acid, with the aid of a gentle heat. Melt the Axunge in the Oil, with the aid of a moderate heat, in a vessel capable of holding six times the quantity; and while the mixture is hot, add the solution of Mercury, also hot, and mix them thoroughly. If the mixture does not froth up, increase the heat a little till this takes place. Keep this Ointment in earthenware vessels, or in glass vessels secluded from the light.	Mix the Acid with the water, and dissolve the Mercury in the mixture, with the aid of a gentle heat. Melt the Lard with the Oil, and while the mixture is hot; add to it the solution of Mercury also hot; let the temperature of the mixture next be raised so as to cause effervescence, and then withdrawing the heat, stir the mixture with a porcelain spoon, until it concretes on cooling.

Much has been written and said about the best mode of preparing this ointment, and the failures in making a nice ointment, have been chiefly from, not getting the effervescence, and in not having the Nitric Acid of sufficient strength.

USE.—Stimulant, detergent.

UNGUENTUM HYDRARGYRI NITRATIS MITIUS.

LONDON.	EDINBURGH.	DUBLIN.
Ointment of Nitrate of Mercury - - - - - - - 1oz. Lard - - - - - - - 7oz.	Not in Pharm.	Not in Pharm.
Rub them together. This ointment is to be used recently prepared.		

This is a new formula, and seems hardly necessary, as the instructions given, shew that it is merely a matter of common dispensing.

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UNGUENTUM HYDRARGYRI NITRICO-OXIDI.

LONDON.	EDINBURGH.	DUBLIN.
	Unguentum OxidiHydrargyri.	AVOIRDUPOIS WEIGHT. *Unguentum Hydrargyri Oxidi Rubri.*
Nitric Oxide of Mercury 1oz.	Red Oxide of Mercury - 1oz.	Red Oxide of Mercury - ʒ i.
White Wax - - - - 2oz.	Axunge - - - - - 8oz.	Ointment of White Wax ʒ vii.
Lard - - - - - - 6oz.		
To the Wax and Lard melted together, add the Nitric Oxide reduced into very fine powder, and mix them.	Triturate them into a uniform mass.	Reduce the Oxide to a very fine powder, and mix it intimately with the Ointment by trituration.

All three alike.

USE.—Stimulant, detergent.

UNGUENTUM IODINII COMPOSITUM.

	Unguentum Iodinei.	
Iodine - - - - - ʒ ss.	Iodine - - - - - - ʒ i.	Pure Iodine - - - - ʒ ss.
Iodide of Potassium - ʒ i.	Iodide of Potassium - ʒ ii.	Iodide of Potassium - ʒ i.
Rectified Spirit - - fl. ʒ i.		
Lard - - - - - - 2oz.	Axunge - - - - - 4oz.	Ointment of White Wax ʒ xivss.
Add the Iodide, reduced into the finest powder, to the Lard, then the Iodine dissolved in the Spirit; and mix all together.	Triturate the Iodine and Iodide together, and then add gradually the Axunge, continuing the trituration till a uniform ointment be obtained.	Rub the Iodine and Iodide of Potassium well together, in a glass or porcelain mortar, add the ointment gradually, and continue the trituration until a uniform ointment is obtained.

All three alike.

USE.—In Bronchocele: the quantity, the size of a nut rubbbed into the affected part twice or thrice a day.

INCOMPATIBLES.—Acids and Acidulous Salts.

UNGUENTUM OPII.

Powdered Opium - - ℈i.	Not in Pharm.	Not in Pharm.
Lard - - - - - - - 1oz.		
Rub them together.		

Now introduced.

UNGUENTUM PICIS.

Pitch,	Not in Pharm.	Not in Pharm.
Wax,		
Resin - - - of each 11oz.		
Olive Oil - - - - 1 pint.		
Melt together and strain through a linen cloth.		

USE.—Stimulant, digestive.

UNGUENTUM PICIS LIQUIDÆ.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		AVOIRDUPOIS WEIGHT.
Tar (from wood) Stockholm, Suet - - - - of each 1 lb.	Tar - - - - - - - - 5oz. Bees' Wax - - - - 2oz.	Tar - - - - - - - ½ pint. Yellow Wax - - - - 4oz.
Melt together and press through a linen cloth.	Melt the Wax with a gentle heat, add the Tar, and stir the mixture briskly while it concretes on cooling.	Melt the Wax with a gentle heat, then add the Tar, and stir the mixture constantly until it concretes.

USE.—To remove tetter, and in tinea capitis.

UNGUENTUM PLUMBI ACETATIS.

Not in Pharm. (*Vide* Ceratum Plumbi Acetatis.)	Acetate of Lead, in fine powder 1oz. Simple Ointment - - 20oz.	Acetate of Lead, in very fine powder - - - - - 1oz. Ointment of White Wax 1 lb.
	Mix them thoroughly.	Melt the Ointment with a gentle heat, then add the Acetate of Lead gradually, and stir the mixture constantly until it concretes.

UNGUENTUM PLUMBI CARBONATIS.

Not in Pharm.	Carbonate of Lead - - 1oz. Simple Ointment - - 5oz.	Carbonate of Lead, in very fine powder - - - - - 3oz. Ointment of White Wax 1 lb.
	Mix them thoroughly.	Melt the Ointment with a gentle heat, then add the Carbonate of Lead gradually, and stir the mixture constantly until it concretes.

UNGUENTUM PLUMBI COMPOSITUM.

Plaster of Lead - - - 3 lb. Olive Oil - - - - 18 fl. oz. Prepared Chalk - - - 6oz. Dilute Acetic Acid - 6 fl. oz.	Not in Pharm.	Not in Pharm.
Dissolve the Plaster in the Oil over a slow fire; then add, first the Chalk and afterwards the Acid, constantly stirring, until they have cooled.		

The quantity of Chalk is now reduced from 8 to 6 ounces, and the Olive Oil from 20 to 18 ounces.

USE.—To dress indolent ulcers.

UNGUENTUM PLUMBI IODIDI.

Iodide of Lead - - - 1oz. Lard - - - - - - - 8oz.	Not in Pharm.	Iodide of Lead, in fine powder ℥i. Ointment of White Wax ℥vii.
Rub them together.		Mix the Iodide of Lead intimately with the Ointment by trituration.

USE.—Employed in chronic enlargement of the joints.

LONDON.	EDINBURGH.	DUBLIN.

UNGUENTUM POTASSII IODIDI.

		AVOIRDUPOIS WEIGHT.
Iodide of Potassium - ʒ ii. Boiling Distilled Water fl. ʒ ii. Lard - - - - - - - 2oz.	Not in Pharm.	Iodide of Potassium - ʒ i. Distilled Water - - - ʒ ss. Ointment of White Wax ʒ vii.
Dissolve the Iodide in the water, the mix with the lard.		Triturate the Iodide of Potassium with the water, then add the Ointment, and rub them well together.

London and Dublin alike.

UNGUENTUM PRECIPITATI ALBI.

Vide Ung. Hydrarg. Ammonio-Chloridi.

UNGUENTUM RESINÆ.

	Unguentum Resinosum.	
Not in Pharm.	Resin - - - - - - 5oz. Axunge - - - - - 8oz. Bees' Wax - - - - 2oz.	Resin, in coarse powder, ½ lb. Prepared Lard - - - 1 lb. Yellow Wax - - - 4oz.
	Melt them together with a gentle heat, and then stir the mixture briskly while it cools and concretes.	Melt them together with a gentle heat; strain the mixture, while hot, through flannel, and stir constantly until it concretes.

Edinburgh contains the most resin.

USE.—A stimulating dressing to indolent ulcers.

UNGUENTUM SABINÆ.

	Ceratum Sabinæ.	
Fresh Savine, bruised - ½ lb.	Fresh Savin - - 2 parts.	Savine Tops, dried, and in fine powder - - - - - ʒ i.
White Wax - - - - 3oz. Lard - - - - - - - 1 lb.	Bees' Wax - - - 1 part. Axunge - - - - 4 parts.	Ointment of White Wax ʒ vii.
With the Lard and Wax melted together mix the Savine; then press through a linen cloth.	Melt the Wax and Axunge together; add the Savin, and boil them together till the leaves are friable, then strain.	Mix the powder intimately with the Ointment by trituration.

London and Edinburgh the same; Dublin made of the powder.

USE.—To keep up suppuration from a blister or issue, by preventing it from healing.

UNGUENTUM SAMBUCI.

Elder Flowers, fresh, Lard, of each - - - 1 lb.	Not in Pharm.	Not in Pharm.
Boil the Elder Flowers in the Lard until they become crisp; then press through a linen cloth.		

USE.—A cool soothing ointment for irritable sores.

℞. Hydrarg. [illegible] ℈j.
Ung. [illegible] ℥j, ss.
[illegible]

LONDON. **EDINBURGH.** **DUBLIN.**

UNGUENTUM SIMPLEX.

Not in Pharm.	Olive Oil - - - 5½ fl. oz. White Wax - - - - 2oz. Melt the Wax in the Oil, and stir the mixture briskly while it concretes on cooling.	AVOIRDUPOIS WEIGHT. Not in Pharm.

USE.—Simple dressing.

UNGUENTUM SULPHURIS.

Sulphur - - - - - ½ lb. Lard - - - - - - 1 lb. Rub them together.	Sublimed Sulphur - - 1oz. Axunge - - - - - 4oz. Mix them thoroughly together.	Sublimed Sulphur - - 1 lb. Prepared Lard - - - 4 lb. Mix them well by trituration.

The Bergamotte is now left out of the London; it is twice the strength of Edinburgh and Dublin.

UNGUENTUM SULPHURIS COMPOSITUM.

Sulphur - - - - - 4oz. White Hellebore Root, powdered - - - - - ℥x. Nitrate of Potash, powdered ℈ii. Soft Soap - - - - - 4oz. Lard - - - - - - 1 lb. Rub them together.	Not in Pharm.	Not in Pharm.

The Bergamotte is omitted in this ointment also.

USE.—For the cure of the itch, applied night and morning.

UNGUENTUM SULPHURIS IODIDI.

Iodide of Sulphur, powdered ℥ss. Lard - - - - - - 1oz. Rub them together.	Not in Pharm.	Not in Pharm.

Now introduced.

USE.—For Psoriasis.

UNGUENTUM ZINCI.

Oxide of Zinc - - - 1oz. Lard - - - - - - 6oz. Mix them together.	Oxide of Zinc - - - 1oz. Simple Liniment - - 6oz. Mix them thoroughly together.	Oxide of Zinc - - - 2oz. Ointment of White Wax 12oz. Melt the Ointment with a gentle heat, and having added the Oxide of Zinc, mix them intimately, and stir constantly until the mixture concretes.

All contain the same proportion of Oxide

USE.—A cooling ointment, useful in opthalmia.

LONDON.	EDINBURGH.	DUBLIN.

VERATRIA.

		AVOIRDUPOIS WEIGHT.
In the Mat. Med. Alkaloid prepared from the Seed of Asagræa Officinalis. No process given.	For process, (*Vide* Appendix.)	Not in Pharm.

TEST.—Slightly soluble in water, more in Ether, but most so in Rectified Spirit. It has no odour, but irritates the nostrils excessively, and has a pungent taste. It is to be most cautiously employed.—LOND.

X

VINUM ALOES.

Socotrine or Hepatic Aloes, reduced to powder . 2oz.	Socotrine or East Indian Aloes 1½oz.	Not in Pharm.
Powdered Canella . . ʒiv.	Cardamom Seeds, ground, Ginger, in coarse powder of each, ʒiss.	
Sherry Wine - - 2 pints.	Sherry . . . . . . 2 pints.	
Macerate for 7 days, and strain.	Digest for 7 days; and strain through linen.	

The ingredients differ, and the strength also, London being stronger than Edinburgh.

DOSE.—1 to 2 drachms, as a stomachic; 1 to 2 ounces, purgative.

VINUM ANTIMONII POTASSIO-TARTRATIS.

	Vinum Antimoniale.	*Liquor Antimonii Tartarizati.*
Crystals of Potassio-Tartrate of Antimony . . . . ℈ii.	Tartar Emetic . . . ℈ii.	Tartarized Antimony . ʒi.
		Distilled Water . . 1 pint.
Sherry Wine . . . 1 pint.	Sherry . . . . . . 1 pint.	Rectified Spirit . . 7 fl. oz.
Rub the crystals into powder, and dissolve.	Dissolve the Salt in the Wine.	Having dissolved the Tartarized-Antimony in the water, and cleared the solution by passing it through a paper filter, add the Spirit and preserve the product in a well-stopped bottle.

All of one strength.

London and Edinburgh made of Wine; Dublin a solution in weak Spirit.

DOSE.—15 to 60 minims, as a diaphoretic in saline mixtures.

VINUM COLCHICI.

Dried Corms of Meadow Saffron - - - - - 8oz.	Colchicum-bulb, dried and sliced - - - - - 8oz.	Not in Pharm.
Sherry Wine - - 2 pints.	Sherry - - - - 2 pints.	
Macerate for 7 days, and strain.	Digest for 7 days; strain, express strongly the residuum, and filter the liquors.	

London and Edinburgh alike.

DOSE.—Half a drachm to a drachm.

X Unguentum Veratria

Veratria ʒß

Lard ʒi

VINUM FERRI.

LONDON.	**EDINBURGH.**	**DUBLIN.**
		AVOIRDUPOIS WEIGHT.
Iron Wire . . . . . 1oz. Sherry Wine . . 2 pints. Digest for 30 days, and strain.	Not in Pharm.	Not in Pharm.

The Pharmacopœia 1788, had 1 ounce of Iron Filings to 1 pint of Spanish White Wine. The College reviving the preparation, orders 1 ounce of annealed Iron Wire for 2 pints.

DOSE.—1 to 4 drachms. A valuable mild tonic.

VINUM GENTIANÆ.

Not in Pharm.	Gentian, in coarse powder, ½oz. Yellow Bark, in coarse powder . . . . . . 1oz. Bitter Orange Peel, dried and sliced . . . . . ʒ ii. Canella, in coarse powder ʒ i. Proof Spirit . . . 4½ fl. oz. Sherry . 1 pint and 16 fl. oz. Digest the root and barks for 24 hours in the spirit; add the wine and digest for 7 days more; strain and express the residuum strongly, and filter the liquors.	Not in Pharm.

DOSE.—Half an ounce to an ounce. Aromatic, tonic.

VINUM IPECACUANHÆ.

Ipecacuanha Root, bruised, 2½oz.	Ipecacuan, in moderately fine powder . . . . 2½oz.	Ipecacuan, in coarse powder, 2½oz.
Sherry Wine . . . 2 pints.	Sherry . . . . . 2 pints.	Sherry Wine . . . 2 pints.
Macerate for 7 days, and strain.	Digest for 7 days, and then filter.	Macerate for 14 days, with occasional agitation; then strain with expression, and filter.

All alike.

DOSE.—Half a drachm to a drachm, diaphoretic; 2 to 4 drachms, emetic.

VINUM OPII.

Extract of Opium . . 2½oz.	Opium . . . . . . 3oz.	Opium, in coarse powder, 3oz.
Cinnamon, bruised,	Cinnamon, bruised,	
Cloves, bruised, of each ʒ iiss.	Cloves, bruised, of each ʒ iiss.	
Sherry Wine . . . 2 pints.	Sherry . . . . . 2 pints.	Sherry Wine . . . 2 pints.
Macerate for 7 days, and strain.	Digest for 7 days, and then filter.	Macerate for 14 days, with occasional agitation; then strain with expression, and filter.

Crude Opium yields rather more than half its weight of Extract of Opium. The Extract ordered in the London is less objectionable in taste, and probably more purely sedative in its action, than common Opium.

Strength of the London will be greater than the other Colleges; and Edinburgh stronger than Dublin, by the difference between troy and avoirdupois weights.

DOSE.—10 to 40 minims. Sedative, narcotic.

VINUM RHEI.

LONDON.	EDINBURGH.	DUBLIN.
		AVOIRDUPOIS WEIGHT.
Not in Pharm.	Rhubarb, in coarse powder, 5oz. Canella, in coarse powder, ʒ ii. Proof Spirit . . . 5 fl. oz. Sherry . 1 pint and 15 fl. oz. Digest for 7 days; strain, express strongly the residuum, filter the liquors.	Rhubarb, in coarse powder, 3oz. Canella, in coarse powder, ʒ ii. Sherry Wine . . . 2 pints. Macerate for 14 days, with occasional agitation; then strain with expression, and filter.

Edinburgh nearly twice as strong as Dublin.

DOSE.—2 to 4 drachms; or even an ounce, as a purgative.

VINUM TABACI.

Not in Pharm.	Tobacco . . . . . 3½oz. Sherry . . . . . 2 pints. Digest for 7 days; strain; express strongly the residuum, and filter the liquors.	Not in Pharm.

DOSE.—10 to 30 minims. Sedative, diuretic; rarely used.

VINUM VERATRI.

White Hellebore Root, sliced, 8oz. Sherry Wine , . . 2 pints. Macerate for 7 days, and strain.	Not in Pharm.	Not in Pharm.

DOSE.—10 to 15 minims. Sometimes given in gout.

ZINCI ACETAS.

Not in Pharm.	Not in Pharm.	For process, (*Vide* Appendix.)

This preparation has been abandoned by the London and Edinburgh Colleges, doubtless from the facility of forming it readily by prescription. Thus, 190 grains of crystallized Acetate of Lead, in solution with 143¾ grains of crystallized Sulphate of Zinc, is at once resolved into 91¾ grains of anhydrous Acetate of Zinc in solution, and the 152 grains of Sulphate of Lead can be separated by a filter.

LONDON.	EDINBURGH.	DUBLIN.
	ZINCI CARBONAS.	
Not in Pharm.	Not in Pharm.	AVOIRDUPOIS WEIGHT. Solution of Chloride of Zinc, 1 pint. Crystallized Carbonate of Soda of Commerce . . . 2 lb. Boiling Distilled Water 6 pts. To the Carbonate of Soda dissolved in the water, add the Solution of Chloride of Zinc, in successive portions, and boil until gas ceases to be evolved; collect the precipitate on a calico filter, and, having poured on distilled water until the washings cease to cause turbidity when dropped into a solution of Nitrate of Silver containing free Nitric Acid, dry the product, first on blotting-paper placed on a porous brick, and finally by a steam or water heat.
	ZINCI CHLORIDUM.	
Hydrochloric Acid . 1 pint. Distilled Water . . 2 pints. Zinc, in small pieces . 7oz. Mix the Acid with the water, and to these add the Zinc; and the effervescence being nearly finished, apply heat until bubbles cease to be evolved. Pour off the liquor, strain, and evaporate until the Salt be dried. Having melted this in a lightly covered crucible by a red heat, pour it out on a flat and smooth stone. Lastly, when it has cooled, break into small pieces, and keep in a well-stopped bottle.	Not in Pharm.	Solution of Chloride of Zinc, any convenient quantity. Evaporate it down in a porcelain capsule, so far, that upon suffering the residual liquor to cool, it solidifies. Subdivide the product rapidly into fragments, and enclose them in a well-stopped bottle.

The late Mr. Liston was in the habit of using a mixture of Flour, or of Sulphate of Lime, and Chloride of Zinc; and the Author has very recently cast it into sticks, for the greater convenience of application, and has had an excellent report of its value in foul ulcers and cancerous tumours.

TEST.—Free from colour; it deliquesces if exposed to air; is soluble in water and in Rectified Spirit. From the watery solution, Hydrosulphuric Acid or Ferrocyanide of Potassium being dropped in, a precipitate is thrown down. What is thrown down by Ammonia or Potash from the same solution, is white, and this is again dissolved by the addition of either precipitant in excess; moreover, what is precipitated by the addition of either Carbonate of Ammonia or Potash, is white, but is not again dissolved when these are added in excess.—LOND.

ZINCI OXIDUM.

LONDON.	EDINBURGH.	DUBLIN.
Sulphate of Zinc . . . 1 lb. Sesquicarbonate of Ammonia 6½oz. Distilled Water . 3 gallons.	Sulphate of Zinc . . 12oz. Carbonate of Ammonia . 6oz.	AVOIRDUPOIS WEIGHT. Carbonate of Zinc, any convenient quantity.
Dissolve separately the Sulphate and Sesquicarbonate in 12 pints of water, and strain; then mix. Wash frequently what is precipitated with water; and lastly, burn it in a sharp fire for 2 hours.	Dissolve each in 2 pints of water; mix the Solutions; collect the precipitate on a filter of linen or calico; wash it thoroughly; squeeze and dry it, and expose it for 2 hours to a red heat.	Place it in a clay crucible furnished with a cover, and expose it to a very low red heat, until a portion of the contents of the crucible, taken from its centre, ceases to effervesce on being dropped into dilute Sulphuric Acid.

As an astringent, Oxide of Zinc is only employed externally in the form of powder or ointment, to slight excoriations, and in opthalmia tarsi. As a tonic, it is employed in epilepsy, and may be given in powder or in pill, in doses of 1 to 2 grains, gradually increased to 10 grains, twice daily.

TEST.—Pulverulent, yellowish white; is soluble in Ammonia, Potash, and Hydrochloric Acids, (shewing the absence of Lead).—LOND. Tasteless; entirely soluble in diluted Nitric Acid, without effervescence. This solution is not affected by Nitrate of Baryta, (shewing the absence of Sulphuric Acid), but gives with Ammonia a white precipitate entirely soluble in an excess of the test, (shewing the absence of Lead and Iron).—EDIN.

ZINCI SULPHAS.

In the Mat. Med. Crystals. No process given.	This Salt may be prepared either by dissolving fragments of Zinc in diluted Sulphuric Acid, till a neutral liquid be obtained, filtering the solution, and concentrating sufficiently for it to crystallize on cooling,—or by repeatedly dissolving and crystallizing the impure Sulphate of Zinc of Commerce, until the product, when dissolved in water, does not yield a black precipitate with Tincture of Galls, and stands the tests enumerated below.	Zinc, laminated, or in small fragments . . . . 4oz. Oil of Vitriol of Commerce 3 fl. oz. Distilled Water . 1 quart. Nitric Acid of Commerce, Dilute Sulphuric Acid of each, fl. ʒi. Prepared Chalk . . . ʒii. Place the Zinc, Oil of Vitriol, and a pint of the water, in a porcelain capsule, and, when gas ceases to be developed, boil for 10 minutes. Pass the solution through a calico filter, and, having added to it the Nitric Acid, evaporate to dryness. Let the dry salt be dissolved in the remainder of the water, and let the solution, when cold, be shaken several times for 6 hours in a bottle with the chalk, and then cleared by passing it through a filter. It is now, after having been acidulated with the dilute Sulphuric Acid, to be evaporated till a pellicle begins to form on

CONTINUED.

AVOIRDUPOIS WEIGHT.

its surface, and then set to crystallize. The crystals thus obtained should be dried on blotting paper, without heat, and then preserved in a bottle. By further concentrating the solution from which the crystals have separated, an additional product will be obtained.

DOSE.—1 to 5 grains, made into a pill, with Conserve of Roses; for external uses, 1 grain to half a drachm, dissolved in a fluid ounce of water.

INCOMPATIBLES.—Alkalies and their Carbonates, Lime Water, Acetate of Lead, Nitrate of Silver, astringent Vegetable Infusions or Decoctions, and Milk.

TEST.—It is soluble in water. The precipitate with Ammonia is white, but is re-dissolved if the test be added in excess, (showing the absence of Iron). What is thrown down by either Chloride of Barium or Acetate of Lead, is not dissolved by dilute Nitric Acid. What is precipitated from 100 grains, dissolved in water, by Sesquicarbonate of Ammonia, is reduced, at a high temperature, to 27·9 grains of Oxide of Zinc.—LOND. When a solution in six waters is boiled with a little Nitric Acid, and Solution of Ammonia is then added till the Oxide of Zinc first thrown is all re-dissolved, no yellow precipitate remains, or a trace only, and the solution is colourless.—EDIN.

ZINCI VALERIANAS.

Not in Pharm.	Not in Pharm.	For process, (*Vide* Appendix.)

APPENDIX.

APPENDIX.

ACIDUM ACETICUM.—EDINBURGH.

Take of Acetate of Lead, any convenient quantity: heat it gradually in a porcelain basin by means of a bath of oil or fusible metal, (8 tin, 4 lead, 3 bismuth) to 320° F.; and stir till the fused mass concretes again: pulverize this when cold, and heat the powder again to 320°, with frequent stirring, till the particles cease to accrete. Add six ounces of the powder to nine fluid drachms and a half of Pure Sulphuric Acid contained in a glass-mattras: attach a proper tube and refrigeratory; and distil from a fusible-metal-bath with a heat of 320° to complete dryness. Agitate the distilled liquid with a few grains of red oxide of lead to remove a little sulpurous acid, allow the vessel to rest a few minutes, pour off the clear liquor, and re-distil it. The density is commonly from 1063 to 1065, but must not exceed 1068·5.

ACIDUM ACETICUM GLACIALE.—DUBLIN.

Take of Acetate of Lead, any convenient quantity:—Place it in an oven at about the temperature of 300°, until it ceases to lose weight, and, having then brought it by trituration to a fine powder, let it be introduced into a flask or retort, and exposed to an atmosphere of dry muriatic acid gas, until very nearly the whole of it exhibits a damped appearance. The flask or retort, being now connected in the usual manner with a Liebig's condenser, let heat be applied by means of a chloride of zinc bath, until the entire of the acetic acid shall have distilled over.

The muriatic acid gas should be *slowly* disengaged from the materials directed in the formula for *Acidum Muriaticum*, using not more than eight ounces of salt for every pound of anhydrous acetate of lead; and, to render it quite dry, it should, before being conducted into the vessel containing the sugar of lead, be made to bubble through oil of vitriol, and then passed through a long tube packed with small fragments of fused chloride of calcium.

The specific gravity of this acid is 1065.

ACIDUM ARSENIOSUM PURUM.—DUBLIN.

(ARSENICI OXYDUM ALBUM SUBLIMATUM.)

Take of Commercial White Oxide of Arsenic, any convenient quantity:—Place it in a Florence flask, the neck of which is made to pass into that of a second flask of larger size, and, applying to the *former* a regulated heat, by suspending it beneath a semi-cylindric hood of sheet iron, a few inches above a small charcoal fire, cause the arsenic to sublime into the *latter*. This sublimation should be conducted under a flue with a good draught, so as to protect the operator from inhaling any vapours which may escape being condensed.

ACIDUM BENZOICUM.—DUBLIN.

Take of Benzoin, any convenient quantity:—Place it in a small cylindric pot of sheet-iron, furnished with a flange at its mouth; and having fitted the pot into a circular hole in a sheet of pasteboard, interpose between the pasteboard and flange a collar of tow, so as to produce a nearly air-tight junction. Let a cylinder of stiff paper, open at one end, eighteen inches high, and having a diameter at least twice that of the pot, be now placed in an inverted position on the pasteboard, and secured to it by slips of paper and flour paste; a couple of inches of the lower part of the pot being passed through a hole in a plate of sheet tin, which is to be kept from contact with the pasteboard by the interposition of a few corks, let a heat just sufficient to melt the benzoin (that of a gas-lamp answers well) be applied, and continued for at least six hours. Let the product thus obtained, if not quite white, be enveloped in bibulous paper, then subjected to powerful pressure, and again sublimed.

ACIDUM CITRICUM.—EDINBURGH.

Take of Lemon-juice, four pints; Prepared Chalk, four ounces and a half, or a sufficiency; Diluted Sulpuric Acid, thirty-six fluid ounces, or in the same proportion to the chalk required:—Boil the Lemon-juice, allow it to rest, pour off the clear liquor, boil this again, and add the chalk to it while hot by degrees till there is no more effervescence, and the liquor ceases to taste acid. Collect the precipitate, and wash it with hot water till the water passes from it colourless. Squeeze the residuum in a powerful press; mix it uniformly with two pints of distilled water; and then add the Sulphuric Acid by degrees and with constant stirring. Try whether a small portion of the liquid, when filtered, gives with solution of nitrate of baryta a precipitate almost entirely soluble in nitric acid; and if the precipitate is not nearly all soluble, add a little citrate of lime to the whole liquor till it stands this test. Separate now the clear liquor by subsidence or filtration, washing the insoluble matter with cold water, and adding the washings to the liquor: concentrate with a gentle heat till crystals form on the surface: set the liquor aside to cool and crystallize; and purify the crystals by repeated solution and crystallization till they are colourless.

ACIDUM GALLICUM.—DUBLIN.

Take of Galls, in coarse powder, one pound; Distilled Water, as much as may be necessary:—Having placed the galls in a porcelain dish, pour on as much water as will convert them into a thick paste, and keep them in this moistened condition for six weeks, at a temperature of between 60° and 70°, adding water from time to time, so as to supply what is lost by evaporation. Let the residue be boiled for twenty minutes, with forty-five ounces of water, and then placed on a calico filter. The filtered solution, on cooling, will afford a copious precipitate. Let this be drained on a calico filter, then subjected to strong expression, after having been first enveloped in blotting paper, and again dissolved in ten ounces of boiling water. When, upon ceasing to apply heat, the solution has cooled down to 80°, pour it off from the crystals which have formed, and, having washed these with three ounces of ice-cold water, dry them, first on blotting paper, and finally by a steam or water heat.

By boiling the undissolved portion of the galls with forty-five additional ounces of water, filtering into a capsule containing the liquor decanted from the crystals formed in the preceding process, evaporating down to the bulk of ten ounces, and cooling to 80°, an additional quantity of the crystallized acid will be obtained.

OR,

Take of Powdered Galls, one pound; Oil of Vitriol of Commerce, twenty-six fluid ounces; Water, five pints and fourteen ounces:—Steep the galls for twenty-four hours in one pint of the water, then transfer them to a glass or porcelain percolator, and pour on a pint and a half of the water in successive portions. Dilute five ounces of the oil of vitriol with an equal bulk of water, and, when the mixture has cooled, add it to the infusion obtained by percolation, stirring well, so as to bring them into perfect contact. Let the viscid precipitate which forms be separated by a filter, and to the solution which passes through add five ounces more of the oil of vitriol, which will yield an additional precipitate. This being added to that previously obtained, let both be enveloped in calico, and subjected to powerful pressure. Dissolve the residue in the rest of the oil of vitriol, this latter being first diluted with what remains of the water; boil the solution for twenty minutes, then allow it to cool, and set it by for a week. Let the deposit which has formed at the end of this period be pressed, dried, and then dissolved in three times its weight of boiling water, clearing the solution, if necessary, by filtration, and, when it has cooled down to 80°, decant the liquid from the crystalline sediment which has formed, and wash the latter with three ounces of ice-cold water. Finally, let it be transferred to blotting-paper, and when deprived by this of adhering liquid, let it be dried perfectly, at a temperature not exceeding 212°.

The gallic acid obtained by either of the preceding processes may be rendered nearly white, by dissolving it in twenty times its weight of boiling distilled water, and causing the solution to traverse a stratum of prepared animal charcoal spread upon a calico filter. When the liquid passes through colourless it should be evaporated to one-sixth of its volume, and then suffered to cool in order to the separation of the crystallized acid.

ACIDUM SULPHURICUM PURUM.—Edinburgh.

If Commercial Sulphuric Acid contains Nitrous Acid, heat eight fluid ounces of it with between ten and fifteen grains of Sugar, at a temperature not quite sufficient to boil the Acid, till the dark colour at first produced, shall have nearly or altogether disappeared. This process removes Nitrous Acid. Other impurities may be removed by distillation; which, on the small scale, is easily managed, by boiling the Acid with a few Platinum Chips in a glass retort by means of a sand-bath or gas-flame, rejecting the first half ounce.

ACIDUM SULPHURICUM PURUM.—Dublin.

Take Oil of Vitrol of Commerce, any convenient quantity:—Introduce it into a small plain retort, containing a few slips of platinum foil, and, passing the beak of the retort into a Florence flask which is to be used as a receiver, with the aid of a small charcoal fire or gas-lamp, distil over one-tenth of the acid. This being rejected, and a fresh receiver of the same kind connected with the retort, let the distillation be resumed, and continued until no more than about an ounce of liquid remains behind. The distilled product should now be transferred to and preserved in a well-stopped bottle.

The specific gravity of this acid is 1846.

ACIDUM TARTARICUM.—Edinburgh.

Take of Bitartrate of Potash, four pounds; Boiling Distilled Water, two gallons and a half; Prepared Chalk, twenty-five ounces and six drachms; Diluted Sulphuric Acid, ten pints and seven fluid ounces; Muriatic Acid, twenty-six fluid ounces and a half, or a sufficiency:—Boil the Bitartrate with two gallons of the water, and add gradually half the chalk, constantly stirring: when the effervescence is over, add a solution obtained by dissolving the rest of the chalk in the muriatic acid diluted with four pints of the water. After the tartrate of lime has subsided, pour off the liquid, and wash the tartrate with distilled water till it is tasteless. Then pour the diluted sulphuric acid on the tartrate, and boil for fifteen minutes. Evaporate with a gentle heat to obtain crystals. Purify these by repeated solution, filtration, and crystallization.

ÆTHER SULPHURICUS.—Edinburgh.

Take of Rectified Spirit, fifty fluid ounces; Sulphuric Acid, ten fluid ounces:—Pour twelve fluid ounces of the Spirit gently over the Acid contained in an open vessel, and then stir them together briskly and thoroughly. Transfer the mixture immediately into a glass mattrass connected with a refrigeratory, and raise the heat quickly to about 280°. As soon as the etherial fluid begins to distil over, supply fresh spirit through a tube into the mattrass in a continuous stream, and in such quantity as to equal that of the fluid which distils over. This is best accomplished by connecting one end of the tube with a graduated vessel containing the spirit,—passing the other end through a cork fitted into the mattrass,—and having a stop-cock on the tube to regulate the discharge. When forty-two ounces have distilled over and the whole spirit has been added, the process may be stopped. Agitate the impure ether with sixteen fluid ounces of a saturated solution of muriate of lime, containing about half an ounce of lime recently slaked. When all odour of sulphurous acid has been thus removed, pour off the supernatant liquor, and distil it with a very gentle heat so long as the liquid which passes over has a density not above 735. More ether of the same strength is then to be obtained from the solution of muriate of lime. From the residuum of both distillations a weaker ether may be obtained in small quantity, which must be rectified by distilling it gently again.

ÆTHER SULPHURICUS.—Dublin.

Take of Rectified Spirit, three pints; Oil of Vitriol of Commerce, eight fluid ounces; Fresh Burned Lime, in fine powder, one ounce:—Mix the acid and ten ounces of the spirit in a glass mattrass, capable of holding a quart at least, and, without allowing the mixture to cool, connect the mattrass with a Liebig's condenser, and, applying a sufficient heat to maintain the liquid in brisk ebullition, commence the distillation. As it proceeds, admit gradually, through a glass tube traversing the cork of the mattrass, the remainder of the spirit, regulating its influx so that the boiling liquid shall maintain a constant level; and, when the entire of it has been introduced, continue the application of the heat until the contents of the mattrass become black, and show a tendency to froth over. (The tube through which the spirit enters should dip by its lower extremity, where its diameter is contracted, at least half an inch beneath the surface of the liquid in the mattrass; and the eduction pipe of the reservoir for the spirit, with which the exterior extremity of the glass tube is connected, should be furnished with a stop-cock, to regulate the descent of the spirit. This reservoir also should be placed at least three feet above the level of the boiling liquid.) The crude ether thus obtained is to be agitated with the pulverized quick-lime, and then rectified, the distillation being continued as long as the product, on being well shaken, continues to have a specific gravity lower than 750. The resulting liquid should be preserved in a cool place in accurately stopped bottles.

A fresh reservoir being attached to the further end of the condenser, and the distillation resumed, a product will be obtained which may be substituted for rectified spirit in a subsequent ether process.

ALCOHOL AMYLICUM—FUSEL OIL.—DUBLIN.

Take of the light liquid which may be obtained at any large distillery by continuing the distillation for some time after the pure spirit has been all drawn off, any convenient quantity:—Introduce it into a small still or retort connected with a condenser, and apply heat, so as to cause distillation. As soon as the oil begins to come over unmixed with water, the receiver should be changed, and the distillation being resumed and carried nearly to dryness, the desired product will be obtained. The liquid drawn over during the first part of the distillation will consist of an aqueous fluid, surmounted by a stratum of the fusel oil. This latter, though impregnated with a minute quantity of water, should be separated and preserved, as being sufficiently pure for use.

AMMONIÆ HYDRO-SULPHURETUM.—DUBLIN.

Take of Solution of Ammonia, four fluid ounces; Sulphuret of Iron, one ounce and a half; Oil of Vitriol of Commerce, one fluid ounce and a half; Water, fifteen ounces; Distilled Water, two ounces:—Place the sulphuret of iron and water in a two-necked bottle, and, adding the oil of vitriol by degrees through a safety funnel, conduct by suitable tubes the sulphuretted hydrogen which is disengaged, first through the distilled water placed in a small intermediate phial, and then to the bottom of a bottle containing the ammonia, the neck of the latter through which the glass tube conveying the gas passes, being loosely plugged with tow. If, when the development of gas has ceased, a drop of the ammoniacal liquid added to a saturated solution of sulphate of magnesia gives no precipitate, the preparation is completed; but should a precipitate occur the hydro-sulphuret still contains free ammonia, and must therefore be again subjected to the action of a stream of sulphuretted hydrogen.

The hydro-sulphuret of ammonia must be kept in a green glass bottle, furnished with an accurately ground stopper.

The specific gravity of this solution is 999.

ARSENICUM PURUM.—DUBLIN.

Take of White Oxide of Arsenic of Commerce, two drachms:—Place the oxide at the sealed end of a hard German glass tube, of about half an inch in diameter and eighteen inches long, and, having covered it with about eight inches of dry and coarsely pulverized charcoal, and raised the portion of the tube containing the charcoal to a red heat, let a few ignited coals be placed beneath the oxide, so as to effect its slow sublimation. When this has been accomplished, the metallic arsenic will be found attached to the interior of the tube at its distant or cool extremity.

In conducting this process, the furnace used in the performance of an organic analysis should be employed, and the fuel should be ignited charcoal. It will be proper also to connect the open extremity of the tube with a flue, for the purpose of preventing the possible escape into the apartment of arsenical vapours ; and, with the view of keeping it from being plugged by the metal, to introduce occasionally into it, as the sublimation proceeds, an iron wire through a cork fixed (but not air-tight) in its open extremity.

BARYTÆ MURIAS.—EDINBURGH.

Take of Carbonate of Baryta, in fragments, ten ounces ; Pure Muriatic Acid, half a pint ; Distilled Water, two pints :—Mix the acid and water; add the carbonate by degrees; apply a gentle heat towards the close of the effervescence; and when the action is over, filter, concentrate, and set aside the solution to crystallize.

OR,

Take Sulphate of Baryta, two pounds ; Charcoal in fine powder, four ounces ; Pure Muriatic Acid, a sufficiency :—Heat the sulphate to redness, reduce it to fine powder, mix the charcoal with it thoroughly, heat the mixture in a covered crucible for three hours at a low white heat. Pulverize the product, put it gradually into five pints of boiling water; boil for a few minutes ; let it rest for a little over a vapour-bath; pour off the clear liquor, and filter it if necessary, keeping it hot. Pour three pints of boiling water over the residuum, and proceed as before. Unite the two liquids ; and while they are still hot, or, if cooled, after heating them again, add pure muriatic acid gradually so long as effervescence is occasioned. In this process the solutions ought to be as little exposed to the air as possible ; and in the last step the disengaged gas should be discharged by a proper tube into a chimney or the ash-pit of a furnace. Strain the liquor, concentrate it, and set it aside to crystallize.

BARII CHLORIDUM.—DUBLIN.

(BARYTÆ MURIAS).

Take of Carbonate of Barytes, coarsely powdered, ten ounces; Pure Muriatic Acid, eight fluid ounces; Distilled Water, as much as is sufficient :—Dilute the acid with a pint and a half of the water, add the carbonate of barytes, and, when effervescence has ceased, evaporate to dryness. Transfer the residue to a Hessian crucible, and having exposed it to a low red heat for twenty minutes, suffer it to cool, then reduce it to a coarse powder, and boil it for ten minutes with a pint and a half of water. Pour off the solution, boil the undissolved residue with ten additional ounces of water, and again decant. Pass the decanted solutions through a paper filter, and, having evaporated the resulting liquid to the bulk of about fourteen ounces, suffer it to cool that crystals may be formed. The mother liquor, by further evaporation and cooling, will yield additional crystals.

OR,

Take of Sulphate of Barytes, one pound and a half; Lamp-black, four ounces; Pure Muriatic Acid, fourteen fluid ounces; Distilled Water, a sufficient quantity:—Heat the sulphate of barytes in a covered crucible, and, while red hot, throw it into distilled water. Let it now, after being reduced to a very fine powder in the manner directed in the formula for *Creta Præparata*, be mixed intimately with the lamp-black, and exposed in a Hessian crucible for two hours to a strong red heat. The crucible being removed from the fire, and permitted to cool, its contents are to be reduced to a coarse powder, and boiled for fifteen minutes with two quarts of water, after which the solution is to be poured off on a paper filter. The undissolved residuum is to be again boiled with one quart of water, and the resulting liquor decanted on the same filter. To the filtered solutions, placed in a large capsule beneath a flue with a good draught, let the muriatic acid be gradually added, as long as it produces effervescence, and then, by means of a sand heat, evaporate to dryness. Boil the residuum with two quarts of water, pass the solution through a paper filter, and, having evaporated it down to one quart, suffer it cool that crystals may be formed. By further concentration the mother liquor will yield additional crystals.

CALCIS PHOSPHAS PRÆCIPITATUM.—DUBLIN.

Take of Ox-bones, burned to whiteness in a clear fire, four ounces; Pure Muriatic Acid, six fluid ounces; Distilled Water, one quart; Solution of Ammonia, eleven fluid ounces; or as much as may be sufficient:—Reduce the calcined bones to a fine powder, and digest upon this the acid, diluted with a pint of the water, until it is dissolved. To the solution, first cleared (if necessary) by filtration, add the remainder of the water, and then the solution of ammonia, until the mixture acquires an alkaline reaction, and, having collected the precipitate upon a calico filter, let it be washed with boiling distilled water as long as the liquid which passes through gives rise to a precipitate, when permitted to drop into a solution of nitrate of silver acidulated with nitric acid. The washed product should now be dried by exposing it for some days on porous bricks to a warm atmosphere.

CHLOROFORMYL.—LONDON.

(CHLOROFORM.)

Take of Chlorinated Lime, four pounds; Rectified Spirit, half a pint; Water, ten pints; Chloride of Calcicum, broken in fragments, a drachm:—Put the lime first mixed with the water into a retort, and to these add the spirit, that the mixture may fill only the third part of the retort. Then heat in a sand bath; and when ebullition first commences, remove the fire as quickly as possible, lest the retort be broken by the suddenly increased heat. Let the solution distil into a receiver as long as there is nothing which subsides, the fire being restored if it be at all needed. Add four times as much water to the distilled liquid, and shake all well together.

Cautiously separate the heavier part as soon as it has subsided, and to this add the chloride, and shake occasionally during an hour; finally let the fluid again distil from a glass retort into a glass receiver.

Free from colour of a pleasant odour. Specific gravity not less than 1·48. It is not quite perfectly soluble in water; does not turn the colour of litmus red. Rubbed on the skin, it quickly evaporates, scarcely leaving any odour.

CHLOROFORUM.—DUBLIN.

Take of Chlorinated Lime, ten pounds; Fresh-burned Lime, five pounds; Water, four gallons; Rectified Spirit, twenty-five ounces; Peroxide of Manganese, in fine powder, two drachms:—Slake the lime with a quart of the water, first raised to the boiling temperature, and, having placed the slaked lime and the chlorinated lime in a sheet-iron or copper still, pour on the residue of the water first mixed with the spirit, and raised to the temperature of 100°. Connect now the still with a condenser, and apply heat, which, however, must be withdrawn the moment the distillation commences. The distilled product, the bulk of which need not exceed a quart, will occur in two distinct strata, the lower of which is the crude chloroform. Let this be agitated twice in succession, with an equal volume of distilled water, and then in a separate bottle with half its volume of pure sulphuric acid. Lastly let it be shaken in a mattrass with the peroxide of manganese, and rectified from off this at a very gentle heat.

The specific gravity of chloroform is 1496.

The lighter liquid which distils over with the chloroform, and the water used in washing the latter, should be preserved with the view of their being introduced, with a new charge, into the still in a subsequent process.

FERRI PULVIS.—DUBLIN.

Take of Peroxide of Iron; Zinc, in small pieces; Oil of Vitriol; Water; of each a sufficient quantity:—Introduce into a gun-barrel as much of the peroxide of iron as will occupy the length of about ten inches, confining it to the middle portion of the barrel by plugs of asbestos. Let the gun-barrel be now placed in such a furnace as is used for organic analysis, one end of it being fitted by means of a cork into a bent adapter whose further extremity dips in water, while the other end (of barrel) is connected with a bottle containing the zinc and water, with the intervention, however, of a desiccation tube including fragments of caustic potash, and a small bottle half filled with oil of vitriol.

Matters being thus arranged, a little oil of vitriol is to be poured into the bottle containing the water and zinc, with the view of developing a sufficiency of hydrogen to expel the air from the interior of the apparatus. As soon as this object is considered to have been accomplished, the part of the tube containing the peroxide of iron must be surrounded with ignited charcoal, and, when it is thus brought to a low red heat, the oil of vitriol is to be gradually added to the zinc, so as to cause a steady current of hydrogen to pass through the oil of vitriol and desiccation tube into the gun-barrel. As soon as the reduction of the oxide is completed, which may be judged to have taken place when the gas bubbles escape at apparently the same rate through the water in which the adapter terminates, and through the bottle containing the oil of vitriol, the fire is to be removed (a slow current of hydrogen being still continued), and when the gun-barrel has assumed the temperature of the air, its metallic contents should be extracted, and preserved in an accurately stopped bottle.

FERRI SULPHAS GRANULATUM.—DUBLIN.

Take of Iron Wire, or turnings of Wrought Iron, four ounces; Oil of Vitriol of Commerce, four fluid ounces; Distilled Water, one pint and a half; Rectified Spirit, ten fluid ounces:—Pour the water on the iron placed in a porcelain capsule, add the oil of vitriol, and when the disengagement of gas has nearly ceased, boil for ten minutes. Filter now through paper into a vessel containing eight ounces of the spirit, and stir the mixture as it cools, in order that the salt may be obtained in minute granular crystals. Let these, deprived by decantation and draining of the adhering liquid, be washed on a funnel or small percolator with the remainder of the spirit; and, when rendered quite dry by repeated pressure between folds of filtering paper, and subsequent exposure for twenty-four hours beneath a glass bell over a common dinner-plate half filled with oil of vitriol, let them be preserved in a well-stopped bottle.

AMMONIÆ AQUA,

ET

AMMONIÆ AQUA FORTIOR.—EDINBURGH.

Take of Muriate of Ammonia, thirteen ounces; Quicklime, thirteen ounces; Water, seven fluid ounces and a half; Distilled Water, twelve fluid ounces:—Slake the lime with the water, cover it up till it cool, triturate it well and quickly with the muriate of ammonia previously in fine powder, and put the mixture into a glass retort, to which is attached a receiver with a safety-tube. Connect with the receiver a bottle also provided with a safety-tube, and containing four ounces of the distilled water, but capable of holding twice as much. Connect this bottle with another loosely corked, and containing the remaining eight ounces of distilled water. The communicating tubes must descend to the bottom of the bottles at the further end from the retort; and the receiver and bottles must be kept cool by snow, ice, or a running stream of very cold water. Apply to the retort a gradually-increasing heat till gas ceases to be evolved; remove the retort, cork up the aperture in the receiver where it was connected with the retort, and apply to the receiver a gentle and gradually-increasing heat, to drive over as much of the gas in the liquid contained in it, but as little of the water, as possible. Should the liquid in the last bottle not have the density of 960, reduce it with some of the stronger aqua ammoniæ in the first bottle, or raise it with distilled water, so as to form aqua ammoniæ of the prescribed density.

AMMONIÆ LIQUOR.—DUBLIN.

(AMMONIÆ CAUSTICÆ AQUA.)

Take of Sal Ammoniac, in fine powder; Fresh-burned Lime; of each eight ounces; Water, four ounces; Distilled Water, sixteen ounces:—Pour on the lime the four ounces of water, and, when the slaked lime has cooled, mix it well with the sal ammoniac by trituration in a mortar. Introduce the mixture into a mattrass of glass, or if such can be had, an iron bottle, and, having closed this by means of a cork perforated by a suitable tube for conveying off the gas, apply, with the intervention of sand, a gentle heat, which must be gradually augmented, and cause the ammonia, as it is evolved, to pass first through a small Wolfe's bottle furnished with a syphon safety-tube containing mercury, and thence to the bottom of a pint bottle containing the distilled water. The temperature of the latter must be prevented from rising as the absorption of the gas proceeds, by surrounding the bottle which contains it with cold water, which should be frequently renewed.

The specific gravity of this solution is 950.

AMMONIÆ LIQUOR FORTIOR.—DUBLIN.

Apply to a mixture of Sal Ammoniac and Slaked Lime, using the proportions given in the preceding formula, and cause the gas, as it is disengaged, to pass to the bottom of a bottle containing eight ounces of *Ammoniæ Liquor;* the temperature of the latter being prevented from rising by surrounding it with cold water, which should be frequently renewed.

OR,

Pass the ammoniacal gas disengaged from eight ounces of sal ammoniac into five ounces of distilled water, taking care to keep the receiver cool.

The specific gravity of this solution is 900.

ANTIMONII TERCHLORIDI LIQUOR.—DUBLIN.

Take of prepared Sulphuret of Antimony, one pound; Muriatic Acid of Commerce, four pints:—Upon the Sulphuret, placed in a porcelain capsule, pour the acid, and, constantly stirring, applying to the mixture, beneath a flue with a good draught, a gentle heat, which must be gradually augmented as the development of the gas begins to slacken, and finally carried to ebullition, and maintained at this temperature for fifteen minutes. The vessel being now removed from the fire, let its liquid contents be separated by filtration through calico, returning what passes through first, in order that a perfectly clear solution may be obtained. Transfer the liquid to another capsule, and, having boiled it down to the bulk of one quart, allow it to cool, and preserve it in a bottle furnished with a well-ground glass stopper.

The specific gravity of this solution is 1470.

ZINCI CHLORIDI LIQUOR.—DUBLIN.

Take of Sheet Zinc, one pound; Muriatic Acid of Commerce; Water; of each, two pints and a half, or as much as may be sufficient; Solution of Chlorinated Lime, one fluid ounce; Prepared Chalk, one ounce:—To the zinc, introduced into a porcelain capsule, gradually add the muriatic acid, applying heat, until the metal is dissolved. Filter the liquid through calico, and, having added to it the solution of chlorinated lime, concentrate at a boiling temperature, until it occupies the bulk of one pint. Permit the solution now to cool down to the temperature of the air, place it in a bottle with the chalk, and, having first added distilled water, so that the bulk of the whole may be a quart, shake the mixture occasionally for twenty-four hours. Finally, filter, and preserve the product in a well-stopped bottle.

The specific gravity of this liquor is 1593.

MORPHIA.—DUBLIN.

Take of Turkey Opium, cut into thin slices, one pound; Distilled Water, six pints; Chloride of Calcium, six drachms; prepared Animal Charcoal, as much as is sufficient:—Macerate the opium for twenty-four hours with a quart of water, and decant. Macerate the residuum for twelve hours with a second quart of the water, decant, and repeat this process with the rest of the water, subjecting the insoluble residuum to strong expression. Let the decanted solutions and expressed liquor be evaporated by a steam or water heat to the bulk of one pint, and then passed through a calico filter. Pour in now the chloride of calcium, first dissolved in four ounces of distilled water, and then proceed with the evaporation until the solution is so far concentrated, that upon cooling nearly the whole of it becomes solid.

Let this solid matter be enveloped in a couple of folds of strong calico, and subjected to powerful pressure, the dark liquid which exudes being reserved for subsequent use. The squeezed cake is now to be acted upon with about half a pint of boiling water, and the whole being thrown upon a paper filter, the precipitate must be well washed. The filtered solution having been evaporated as before, cooled and solidified, the residue is to be again subjected to expression. If the product be not quite white, this process should be repeated a third time, the liquid forced out during expression being always preserved. Let the squeezed cake be dissolved in six ounces of boiling water, and, if necessary, cleared by filtration through prepared animal charcoal, the portion of it soaked by the filter being carefully washed out of it; and to the solution thus obtained let water of ammonia be added, in slight excess, and let the crystalline precipitate which forms when the liquor has cooled be collected on a paper filter, and washed with cold distilled water until the washings cease to give a precipitate upon being dropped into an acid solution of nitrate of silver. Lastly, let the filter be transferred to a porous brick, in order that the morphia it contains may become dry.

The liquids separated by expression from the muriate of morphia, in the preceding process, having been diluted with water, so as to occupy the bulk of four ounces, and then supersaturated slightly with ammonia, let the precipitate which forms be collected, after the lapse of six hours, on a filter, and washed with a little cold water. This, if re-dissolved in dilute muriatic acid, boiled with a little animal charcoal, and filtered, will, upon cooling, afford a crystalline deposit, from which, when pressed, dissolved in water, and supersaturated with ammonia, an additional quantity of morphia will be procured.

MORPHIÆ MURIAS.—EDINBURGH.

Take of Opium, twenty ounces; Water, eight pints; Muriate of Lime, one ounce, or a slight excess:—Macerate the opium in fragments for twenty-four hours in two pints of the water; and separate the infusion, squeezing well the residue. Repeat the maceration successively with two pints more of the water till the whole is made use of. Concentrate the whole infusions over the vapour bath to one pint, and add the muriate of lime dissolved in four fluid ounces of water. Set the whole aside to settle; pour off the liquid; wash the sediment with a little water, adding the washings to the liquid. Evaporate the liquid sufficiently in the vapour bath for it to solidify on cooling. Subject the cooled mass to very strong pressure in a cloth; re-dissolve the cake in a sufficiency of warm distilled water; add a little fine powder of white marble, and filter; acidulate the filtered fluid with a very little muriatic acid; and concentrate a second time in the vapour bath for crystallization. Subject the crystals again to very strong pressure in a cloth. Repeat the process of solution, clarification by marble and muriatic acid, concentration, and crystallization, until a snow-white mass be obtained.

On the small scale trouble and loss are saved by decolorizing the solution of muriate of morphia by means of a little purified animal charcoal after two crystallizations. But on the large scale it is better to purify the salt by repeated crystallizations alone, and to treat all the expressed fluids, except the first, in the same way with the original solution, of impure muriate of morphia. An additional quantity of salt may often be got from the first dark and resinous fluid obtained by expression, on merely allowing it to remain at rest for a few months, when a little muriate of morphia may be deposited in an impure condition.

The opium, which yields the largest quantity of precipitate by carbonate of soda according to the formula in Materia Medica, under the article " Opium," yields muriate of morphia not only in greatest proportion, but likewise with the fewest crystallizations.

MORPHIÆ MURIAS.—DUBLIN.

Take of Morphia, in fine powder, one ounce; Pure Muriatic Acid, four fluid drachms and a half, or a sufficient quantity; Distilled Water, two ounces and a half:—Mix the acid with the water, heat to about 200°, and add the morphia, constantly stirring, so that a solution may be formed having a slightly acid reaction. Set this to cool for twelve hours, and let the crystals which separate be drained of the liquor which surrounds them, and dried on blotting-paper. The decanted liquor will, by further concentration and cooling, give additional crystals.

OLEA ESSENTIALIA.

EDINBURGH.

VOLATILE OILS are obtained chiefly from the flowers, leaves, fruits, barks, and roots of plants, by distilling them with water, in which they have been allowed to macerate for some time. In order to obtain these oils profitably and of good quality, a great variety of conditions must be attended to, differing in regard to each, and such as it would be out of place to enumerate here in detail. Certain general principles, however, may be mentioned.

Flowers, leaves, and fruits generally yield the finest oils, and in greatest quantity, when they are used fresh. Many, however, answer equally well, if they have been preserved by beating them into a pulp with about twice their weight of muriate of soda, and keeping the mixture in well-closed vessels.

Substances yielding volatile oils must be distilled with water, the proper proportion of which varies for each article, and for the several qualities of each. In all instances the quantity must be such as to prevent any of the material from being empyreumatized before the whole oil is carried over. In operations where the material is of pulpy consistence, other contrivances must be resorted to for the same purpose. These chiefly consist of particular modes of applying heat so as to maintain a regulated temperature not much above

212°. On the small scale heat may be thus conveniently applied by means of a bath of a strong solution of muriate of lime, or by means of an oil-bath, kept at a stationary temperature with the aid of a thermometer. On the large scale heat is often applied by means of steam under regulated pressure. In other operations it is found sufficient to hang the material within the still in a cage or bag of fine net-work; and sometimes the material is not mingled with the water at all, but is subjected to a current of steam passing through it.

The best mode of collecting the oil is by means of the refrigeratory, which consists of a long narrow cylinder slightly inclined to the horizon, and of a tube which passes along the centre of the cylinder, and is fixed at each end so that the space between them is air-tight; and by means of a funnel entering at the lower end of this interspace, and an exit tube from its upper extremity, a stream of cold water may be kept constantly running, by which refrigeration and the condensation of vapours within the inner tube are far more effectually accomplished than by any other mode that has hitherto been devised. The water and oil drop together into a tall narrow vessel provided with a lateral tube or lip near the top, and another tube rising from the bottom to about a quarter of an inch below the level of the former. It is evident that with a receiver of this construction the water will escape by the lower tube; while the volatile oil, as it accumulates, will be discharged by the upper one, except in the very few instances where the oil is heavier than water.

By attending to the general principles now explained, Volatile Oils may be readily obtained of excellent quality—

From the flowers of
  ANTHEMIS NOBILIS,
  LAVANDULA VERA, and
  RUTA GRAVEOLENS;
From the fruit of
  ANETHUM GRAVEOLENS, bruised,
  CARUM CARUI, bruised,
  EUGENIA PIMENTO, bruised,
  FŒNICULUM OFFICINALE, bruised,
  JUNIPERUS COMMUNIS, bruised,
  PIPER CUBEBA, ground, and
  PIMPINELLA ANISUM, ground;
From the undeveloped dried flowers of
  CARYOPHYLLUS AROMATICUS;
From the tops of
  JUNIPERUS SABINA, and
  ROSMARINUS OFFICINALIS;
From the entire herb of
  MENTHA PIPERITA,
  MENTHA PULEGIUM,
  MENTHA VIRIDIS, and
  ORIGANUM MAJORANA;
And also from the bruised root of
  SASSAFRAS OFFICINALE.

OLEUM TEREBINTHINÆ PURIFICATUM.

Take of Oil of Turpentine, one pint; Water, four pints; Distil as long as oil comes over with the water.

OLEUM COPAIBÆ.

Take of Copaiva, one ounce; Water, one pint and a half:—Distil, preserving the water; when most of the water has passed over, heat it, return it into the still, and resume the distillation; repeat this process so long as a sensible quantity of oil passes over with the water.

DUBLIN.

The Volatile or Essential Oils may be obtained by the following general process: The substance from which the oil is to be extracted is macerated for twenty-four hours, with five times its weight of water, in a sheet-tin or copper still, and, a condenser being then attached, half the water is drawn over by distillation, on the surface of which the oil will be found to float, unless (which is rarely the case) it should be heavier than water, when it will be found at the bottom of the receiver. The oil having been separated, the aqueous product, which is a saturated solution of the oil in water, is to be returned to the still, and the distillation resumed, and continued till the resulting liquid has the same volume as before. The oil is again separated, the watery product returned to the still, and the distillation resumed; and this process is to be repeated until it ceases to afford any additional oily product. The oil thus obtained is to be separated as completely as possible from water, and preserved in a well-stopped bottle.

In this way Volatile Oils may be obtained—

From the entire herb of
    MENTHA PIPERITA,
    MENTHA PULEGIUM,
    MENTHA VIRIDIS;
From the seeds or fruit of
    CARUM CARUI,
    CUBEBA OFFCINALIS,
    EUGENIA PIMENTA,
    FŒNICULUM OFFICINALE,
    JUNIPERUS COMMUNIS,
    MYRISTICA MOSCHATA,
    PIMPINELLA ANISUM;
From the flowers of
    ANTHEMIS NOBILIS,
    LAVANDULA VERA;
From the undeveloped dried flowers of
    CARYOPHYLLUS AROMATICUS;
From the tops of
    JUNIPERUS SABINA,
    ROSMARINUS OFFICINALIS;
From the bark of
    CINNAMOMUM ZEYLANICUM.

The water distilled over in the preparation of the several oils should be preserved for medical use.

POTASSÆ BICARBONAS.—EDINBURGH.

Take of Carbonate of Potash, six ounces; Carbonate of Ammonia, three ounces and a half:—Triturate the carbonate of ammonia to a very fine powder; mix with it the carbonate of potash; triturate them thoroughly together, adding by degrees a very little water, till a smooth and uniform pulp be formed. Dry this gradually at a temperature not exceeding 140°, triturating occasionally towards the close; and continue the desiccation till a fine powder be obtained, entirely free of ammoniacal odour.

POTASSÆ BICARBONAS.—DUBLIN.

Take of Carbonate of Potash from Pearlash, one pound; Distilled Water, one quart; Muriatic Acid of Commerce, one pint and a half; Water, three pints; Chalk in small fragments, one pound, or a sufficient quantity:—Dilute the muriatic acid with the water, and having dissolved the carbonate of potash in the *distilled* water, filter the solution into a three-pint bottle capable of being tightly closed by a cork traversed by a glass tube sufficiently long to pass to the bottom of the solution. A second bottle, in the bottom of which a few holes are drilled, and the mouth of which admits of being closed by a cork also traversed by a glass tube, having been filled with the chalk, and placed in a glass or porcelain jar of the same height with itself, but of somewhat larger diameter, the exterior ends of the two tubes are to be connected *air-tight* by a tube of vulcanized Indian rubber. The cork of the bottle containing the carbonate of potash being placed *loosely*, and that of the other bottle *tightly* in its place, and the muriatic acid having been poured into the jar in which is lodged the perforated bottle containing the chalk, the liberation of carbonic acid commences, and as soon as it is judged that a sufficient amount of it has been developed to expel completely the air from the apparatus, the cork of the carbonate of potash bottle is to be forced into it quite tight, and the process is to be abandoned to itself for a week. At the end of this time numerous crystals of the bicarbonate of potash will have formed, which are to be removed, shaken in a capsule with twice their bulk of cold water, which is to be rapidly decanted, next drained, and finally dried on bibulous paper by mere exposure to the atmosphere. The mother liquor, if filtered, and concentrated to one-half, at a temperature not exceeding 110°, will yield additional crystals.

The tube immersed in the solution of carbonate of potash will have to be occasionally cleared of the crystals with which it is liable to become plugged, else the process will be suspended.

POTASSÆ NITRAS PURUM.—DUBLIN.

Take of Commercial Nitre, four pounds; Distilled Water, five pints, or a sufficient quantity:—Having dissolved the Nitre in two pints of the water at a boiling temperature, let the heat be withdrawn, and the solution be stirred constantly as it cools, in order that the salt may be obtained in very minute crystals. These, deprived as much as possible of the uncrystallized solution by decantation and draining, are to be washed in a glass or earthenware percolator with the remainder of the water, or until the liquid which trickles through ceases to give a precipitate when dropped into a solution of nitrate of silver. The contents of the percolator should now be extracted, and dried in an oven.

POTASSII IODIDUM.—EDINBURGH.

Take of Iodine (dry), five ounces; Fine Iron Wire, three ounces; Water, four pints; Carbonate of Potash (dry), two ounces and six drachms:—With the water, iodine and iron wire prepare the solution of iodide of iron as directed for Ferri Iodidi Syrupus. Add immediately, while it is hot, the carbonate of potash previously dissolved in a few ounces of water; stir carefully, filter the product, and wash the powder on the filter with a little water. Concentrate the liquor at a temperature short of ebullition, till a dry salt be obtained, which is to be purified from a little red oxide of iron and other impurities, by dissolving it in less than its own weight of boiling water, or still better by boiling it in twice its weight of rectified spirit, filtering the solution, and setting it aside to crystallize. More crystals will be obtained by concentrating and cooling the residual liquor.

POTASSII IODIDUM.—DUBLIN.

(POTASSÆ HYDRIODAS.)

Take of Pure Iodine, reduced to powder, four ounces and a half; Filings, or thin Turnings of Wrought Iron, separated from impurities by a magnet, two ounces; Pure Carbonate of Potash, two ounces and a half, or a sufficient quantity; Distilled Water, three pints and a half:—Heat gently five ounces of the water with the iron and three ounces of the iodine, for twenty minutes, and then boil until the solution loses its red colour. Filter this through paper, washing the filter with five ounces of water at a boiling temperature, and, in the solution thus obtained, dissolve, by digestion and shaking, the remainder of the iodine. To the carbonate of potash, dissolved in a quart of the water, and heated to 212° in a large porcelain capsule, add the solution of iron and iodine, and boil until effervescence ceases, adding, if necessary, a little more carbonate of potash, so that the liquor may be very slightly alkaline. Filter now, washing the precipitate with the remaining pint of water boiling hot, and, having evaporated the liquid till a pellicle begins to appear on its surface, let it be set by that crystals may form. These, when dried on blotting paper, should be preserved in a bottle furnished with a perfectly tight stopper. The liquor from which the crystals have separated will, by further evaporation and cooling, afford an additional quantity of the salt.

QUINÆ SULPHAS.—EDINBURGH.

Take of Yellow Bark, in coarse powder, one pound; Carbonate of Soda, eight ounces; Sulphuric Acid, half a fluid ounce; Purified Animal Charcoal, two drachms:—Boil the bark for an hour in four pints of water, in which half the carbonate of soda has been dissolved; strain and express strongly through linen or calico; moisten the residuum with water, and express again; and beat this twice. Boil the residuum for half an hour with four pints of water and half the sulphuric acid; strain, express strongly, moisten with water, and express again. Boil the residuum with three pints of water and a fourth part of the acid; strain, and squeeze as before. Boil again the residuum with the same quantity of water and acid; strain, and squeeze as formerly. Concentrate the whole acid liquids to about a pint; let the product cool; filter it; and dissolve in it the remainder of the carbonate of soda. Collect the impure quina on a cloth, wash it slightly, and squeeze out the liquor with the hand. Break down the moist precipitate in a pint of distilled water, add one fluid scruple of sulphuric acid, heat it to 212°, and stir occasionally. Should any precipitate retain its gray colour, and the liquid be neutral, add sulphuric acid drop by drop, stirring constantly, till the gray colour disappears. Should the liquid redden litmus, neutralize it with a little carbonate of soda. Should crystals form on the surface, add boiling distilled water to dissolve them. Filter through paper, preserving the funnel hot; set the liquid aside to crystallize; collect, and squeeze the crystals; dissolve them in a pint of distilled water heated to 212°; digest the solution for fifteen minutes with the animal charcoal; filter, and crystallize as before. Dry the crystals with a heat not exceeding 140°.

The mother liquors of each crystallization will yield a little more salt by concentration and cooling.

QUINÆ SULPHAS.—DUBLIN.

(QUININÆ SULPHAS.)

Take of Yellow Bark, in powder, one pound; Water, one gallon and a half; Oil of Vitriol of Commerce, half a fluid ounce; Rectified Spirit, three pints; Slacked Lime, one ounce; Animal Charcoal, half an ounce; Dilute Sulphuric Acid, half a fluid ounce, or a sufficient quantity:—Macerate the bark for twenty-four hours with half a gallon of the water, acidulated with two drachms of the oil of vitriol; then boil for half an hour, and decant. Boil the residue with a second half gallon of the water, acidulated with one drachm of the oil of vitriol, and again decant; and let this process be a third time performed with the rest of the water, and the residual drachm of oil of vitriol. Let the decanted liquors be evaporated to the bulk of one quart, and filtered through calico when cold, and to the solution thus obtained add the lime, until the mixture becomes decidedly alkaline. The precipitate, collected on a calico filter, is to be washed with about a pint of cold water, and, when partially dried on porous bricks, to be enveloped in blotting-paper, and subjected to powerful pressure. The pressed mass must now be introduced into a flask containing a pint of the spirit, which is to be raised to and maintained at the temperature of ebullition for twenty minutes, and then, after the subsidence of the insoluble matter, decanted. This process having been repeated successively with the second and third pints of spirit, and the undissolved residuum having been subjected to expression, let the decanted and expressed liquors be cleared by passing them through a paper filter, and then subjected to distillation, so as to recover the entire of the spirit. The brown viscid mass which remains is now to be mixed with sixteen ounces of water, and, this being raised to the boiling point, the dilute sulphuric acid must be added, so as to produce a neutral or very slightly acid solution. Add now the animal charcoal, boil for five minutes, filter, and set to cool, in order that crystals may be formed, which are to be dried on blotting-paper by mere exposure to the atmosphere. The liquor decanted from the crystals will, by further concentration and cooling, yield an additional product.

QUINÆ MURIAS.—Dublin.

Take of Sulphate of Quina, one ounce; Chloride of Barium, one hundred and twenty-three grains; Distilled Water, thirty-two ounces:—Dissolve the chloride of barium in two ounces of the water, and the sulphate of quina in the remainder, raised to the temperature of ebullition. Mix the two solutions, evaporate to one half, filter, and continue the evaporation by means of a steam or water heat, until crystalline spiculæ begin to appear. The solution is now to be permitted to cool, and the crystals which separate to be dried on blotting-paper. The liquor decanted off the crystals will, by farther concentration and cooling, yield an additional product.

QUINÆ VALERIANAS.—Dublin.

Take of Muriate of Quina, seven drachms; Valerianate of Soda, one hundred and twenty-four grains; Distilled water, sixteen ounces:—Dissolve the valerianate of soda in two ounces, and the muriate of quina in the remainder of the water, and the temperature of each solution being raised to 120°, but not higher, let them be mixed, and let the mixture be set by for twenty-four hours, when the muriate of quina will have become a mass of silky acicular crystals. Let these be pressed between folds of blotting-paper, and dried without the application of artificial heat.

Instead of weighing out seven drachms of muriate of quina, and dissolving it in water, as is above prescribed, we may employ the solution of the muriate prepared from an ounce of the sulphate, as directed in the formula for *Quinæ Murias*, such solution having been first evaporated to fourteen ounces. It may be observed here, that should it become necessary to evaporate a liquid containing valerianate of quina, care must be taken that its temperature does not rise higher than 120°.

SODÆ PHOSPHAS.—EDINBURGH.

Take of Bones burnt to whiteness, ten pounds; Sulphuric Acid, two pints, and four fluid ounces; Carbonate of Soda, a sufficiency:—Pulverize the bones and mix them with the acid; add gradually six pints of water; digest for three days, replacing the water which evaporates; add six pints of boiling water, and strain through strong linen: pass more boiling water through the mass on the filter till it comes away nearly tasteless. Let the impurities subside in the united liquors, pour off the clear fluid, and concentrate to six pints. Let the impurities again settle; and to the clear liquor, which is to be poured off and heated to ebullition, add carbonate of soda, previously dissolved in boiling water, until the acid is completely neutralized. Set the solution aside to cool and crystalize. More crystals will be obtained by successively evaporating, adding a little carbonate of soda till the liquid exerts a feeble alkaline reaction on litmus-paper, and then allowing it to cool. Preserve the crystals in well-closed vessels.

SODÆ PHOSPHAS.—DUBLIN.

Take of Ox-bones, burned to whiteness in a clear fire, ten pounds; Oil of Vitriol of Commerce, fifty-six fluid ounces; Distilled Water, four gallons and a half, or a sufficient quantity; Crystallized Carbonate of Soda of Commerce, twelve pounds; or a sufficient quantity:—On the bone earth, reduced to a fine powder, and placed in a large dish of earthenware or lead, pour the oil of vitriol and mix well with a glass or porcelain rod, so that every particle of the powder may be moistened by the acid After the lapse of twenty-four hours, add gradually, and with constant stirring, one gallon of distilled water, and digest for forty-eight hours, pouring on occasionally a little water, so as to restore what has been lost by evaporation. Add now a second gallon of the water, and, having well agitated the mixture, and continued the digestion for another hour, let the whole be thrown upon a calico filter; and, when the liquid has ceased to trickle through, let the precipitate be repeatedly washed with boiling distilled water, until the washings, allowed to drop on blue litmus-paper, redden it only in a very slight degree. Concentrate the filtered solution and washings to the bulk of one gallon, and, having set it by for twenty-four hours, pass it through a filter. To the filtered solution, raised to the temperature of 212°, gradually add the carbonate of soda previously dissolved in two gallons of boiling water, until the mixture acquires a slight alkaline reaction, and then place the whole upon a calico filter. The clear solution which passes through, when concentrated until a film begins to form on its surface, will, upon cooling, afford crystals of phosphate of soda; and from the mother liquor an additional product may be obtained by further concentration. The salt, when dried on blotting-paper, should be preserved in a well-stopped bottle.

SODÆ VALERIANAS.—DUBLIN.

Take of Bichromate of Potash, reduced to powder, nine ounces; Fusel Oil, four fluid ounces; Oil of Vitriol of Commerce, six fluid ounces and a half; Water, half a gallon; Solution of Caustic Soda, one pint, or as much as is sufficient:—Dilute the oil of vitriol with ten ounces, and dissolve with the aid of heat the bichromate of potash, in the remainder of the water. When both solutions have cooled down to nearly the temperature of the atmosphere, place them in a mattrass, and, having added the fusel oil, mix well by repeated shaking, until the temperature of the mixture, which first rises to about 150°, has fallen to 80° or 90°. The mattrass having been now connected with a condenser, heat is to be applied, so as to distil over about half a gallon of liquid. Let this, when exactly saturated with the solution of caustic soda, be separated from a little oil that floats on its surface, and evaporated down until, the escape of aqueous vapour having entirely ceased, the residual salt is partially liquefied. The heat should now be withdrawn, and when the valerianate of soda has concreted, it is, while still warm, to be divided into fragments, and preserved in a well-stopped bottle.

SPIRITUS ÆTHERIS NITRICI.—EDINBURGH.

Take of Rectified Spirit, two pints and six fluid ounces Pure Nitric Acid (D. 1500,) seven fluid ounces:—Put fifteen fluid ounces of the spirit, with a little clean sand, into a two-pint mattrass, fitted with a cork, through which are passed a safety-tube terminating an inch above the spirit, and another tube leading to a refrigeratory. The safety-tube being filled with pure nitric acid, add through it gradually three fluid ounces and a half of the acid. When the ebullition which slowly rises is nearly over, add the rest of the acid gradually, half a fluid ounce at a time, waiting till the ebullition caused by each portion is nearly over before adding more, and cooling the refrigeratory with a stream of water, iced in summer. The ether thus distilled over, being received in a bottle, is to be agitated first with a little milk of lime, till it ceases to redden litmus paper, and then with half its volume of concentrated solution of muriate of lime. The pure hyponitrous ether thus obtained, which should have a density of 899, is then to be mixed with the remainder of the rectified spirit, or exactly four times its volume.

Spirit of nitric ether ought not to be kept long, as it always undergoes decomposition, and becomes at length strongly acid. Its density by this process is 847.

SPIRITUS ÆTHEREUS NITROSUS.—Dublin.

Take of Rectified Spirit, two pints and eight fluid ounces; Pure Nitric Acid, three fluid ounces; Water, one ounce; Solution of Ammonia, a sufficient quantity:—Place six ounces of the spirit in a glass mattrass capable of holding a quart, and connect this with a Liebig's condenser, whose further extremity is fitted loosely by a collar of tow into a thin eight-ounce phial. Add now the water to the nitric acid, and, having introduced half of the resulting solution into the mattrass, through a safety syphon tube, close the mouth of this tube with a cork, and apply for a few moments a gentle heat, so as to cause a commencement of ebullition. When the *action* (which, shortly after commencing, proceeds with much violence, and should be moderated by the external application of cold water) has relaxed, introduce gradually the remainder of the acid, so as to restore it. The action having entirely ceased, agitate the distilled product with half its bulk of the solution of Ammonia; allow the mixture to rest for a few minutes, and, having separated the supernatant etherial liquid, mix four ounces of it with the rest of the spirit, and preserve the product in small, strong, and accurately stopped bottles.

In the performance of the preceding distillation the condenser should be fed with ice-cold water, and the phial, in which the distilled liquid is received, should be surrounded by a mixture of one part salt and two of pounded ice; or, when ice cannot be procured, with a mixture of eight parts of sulphate of soda in small crystals and five of commercial muriatic acid.

STRYCHNIA.—Edinburgh.

Take of Nux Vomica, one pound; Quick Lime, one ounce and a half; Rectified Spirit, a sufficiency:—Subject the nux vomica for two hours to the vapour of steam, chop or slice it, dry it thoroughly in the vapour bath, or hot air press, and immediately grind it in a coffee-mill. Macerate it for twelve hours in two pints of water, and boil it; strain through linen or calico, and squeeze the residuum; repeat the maceration and decoction twice with a pint and a half of water. Concentrate the decoctions to the consistence of thin syrup; add the lime in the form of milk of lime; dry the precipitate in the vapour bath; pulverize it, and boil it with successive portions of rectified spirit till the spirit ceases to acquire a bitter taste. Distil off the spirit till the residuum be sufficiently concentrated to crystallize on cooling. Purify the crystals by repeated crystallizations.

STRYCHNIA.—Dublin.

Take of Nux Vomica, in powder, one pound; Water, one gallon and a half; Oil of Vitriol of Commerce, half a fluid ounce; Slacked Lime, one ounce: Rectified Spirit, one quart; Dilute Sulphuric Acid; Solution of Ammonia, of each a sufficient quantity; Prepared Animal Charcoal, half an ounce:—Macerate the nux vomica for twenty-four hours with half a gallon of the water, acidulated with two drachms of the acid, and, having boiled for half an hour, decant. Boil the residuum with a second half gallon of the water, acidulated with one drachm of the acid; decant, and repeat this process with the remaining water and acid, the undissolved matter being finally submitted to strong expression. The decanted and expressed liquors having been passed through a filter, and then evaporated to the consistence of a syrup, let this be boiled with the rectified spirit for twenty minutes, the lime being added in successive portions during the ebullition, until the solution becomes decidedly alkaline. Filter through paper, and having drawn off by distillation the whole of the spirit, let the residuum be dissolved in the dilute sulphuric acid, and to the resulting liquid, after having been cleared by filtration, add the solution of ammonia in slight excess, and let the precipitate which forms be collected upon a paper filter, dried, and then dissolved in a minimum of boiling rectified spirit. Into this solution introduce the animal charcoal, digest for twenty minutes, then filter, and allow the residual liquor to cool, when the strychnia will separate in crystals.

VERATRIA.—EDINBURGH.

Take any convenient quantity of Cevadilla: pour boiling water over it in a covered vessel, and let it macerate for twenty-four hours; remove the cevadilla, squeeze it, and dry it thoroughly with a gentle heat. Beat it now in a mortar, and separate the seeds from the capsules by brisk agitation in a deep narrow vessel. Grind the seeds in a coffee mill, and form them into a thick paste with rectified spirit. Pack this firmly in a percolater, and pass rectified spirit through it till the spirit ceases to be coloured. Concentrate the spirituous solutions by distillation so long as no deposit forms; and pour the residuum while hot into twelve times its volume of cold water. Filter through calico, and wash the residuum on the filter so long as the washings precipitate with ammonia. Unite the filtered liquid with the washings, and add an excess of ammonia. Collect the precipitate on a filter, wash it slightly with cold water, and dry it first by imbibition with filtering-paper, and then in the vapour bath. A small additional quantity may be got by concentrating the filtered ammoniacal fluid and allowing it to cool.

Veratria thus obtained is not pure, but sufficiently so for medical use. From this coloured substance it may be obtained white, though at considerable loss, by solution in very weak muriatic acid, decolorization with animal charcoal, and re-precipitation with ammonia.

ZINCI ACETAS.—DUBLIN.

Take of Acetate of Lead, one pound; Sheet Zinc, four ounces; Distilled Water, two pints and a half; Solution of Chlorinated Lime, a sufficient quantity:—Dissolve the acetate of lead in the water, and, having placed the solution in a cylindric jar, immerse in it the zinc rolled into a coil. After the lapse of twenty-four hours decant the liquid, and, having reduced it by evaporation to fifteen ounces, drop into it, while boiling hot, the solution of chlorinated lime, until a reddish precipitate ceases to form. It is now to be cleared by passing it through a filter, then acidulated by the addition of a few drops of acetic acid, and evaporated down to ten fluid ounces, when, upon cooling, crystals will form. These, and any additional crystals obtained by the concentration of the mother liquor, should be dried on blotting paper placed on a porous brick, and then preserved in a well-stopped bottle.

ZINCI VALERIANAS.—Dublin.

Take of Valerianate of Soda, two ounces and a half; Sulphate of Zinc, two ounces and seven drachms; Distilled Water, one quart:—Dissolve the valerianate of soda in one-half, and the sulphate of zinc in the remaining half of the water, and, having raised both solutions to 200°, mix them, and skim off the crystals which are produced. Let the solution be now evaporated at a temperature not exceeding 200°, until it is reduced to the bulk of four ounces, removing, as before, the crystals from the surface, in proportion as they form, and placing them with those already obtained. The salt thus procured is to be steeped for an hour in as much cold distilled water as is just sufficient to cover it, and then transferred to a paper filter, on which it is to be first drained, and then dried at a heat not exceeding 100°.

THE END.

LONDON:
BRIDGEWATER, PRINTER, SOUTH MOLTON STREET, OXFORD STREET.

Calamus aromaticus ʒvi } Dose an ounce. An excellent remedy es-
Aq. Ferventis ℥xii } pecially with bark or quinia in Intermittents. And useful in flatulent colic. Has cured intermittents when bark had failed. Omitted in the Pharmacopœias.

Anthemis Pyrethrum. Sialogogue. useful in paralysis of the tongue and affections of the surrounding parts - - - - - - -

Strychnia gr. i } Dose ⅙ minims in paralysis to be increased until twitch-
Ac. Acet. dil. ʒi } ings commence

Corticis Radicis Granati ℥ii } Boil to one half and strain.
Aq. Oii } An excellent remedy in Tape-worm, the whole quantity to be given to an adult divided into three doses, at intervals of half an hour: it is preceded the evening before by a dose of Castor oil, and the remedy itself taken fasting: the first two doses are sometimes rejected; but still the third dose is to be taken — — — —

Sulph. [illegible] ℥x
[illegible] ʒi
Tinct. [illegible]
[illegible] Calumba
[illegible] ʒii

Spermatorrhœa — Caustic Solution to membranous urethra — Spirits of Camph. [illegible] at bed time
Liq. Pottass & Gent. Comp. as Tonic, with ablution and light diet —

Hydrocele Solution
Tinct. Iodin. Comp. 1 part to 3 of water — and ~~th~~ draw and leave it in —

Evaporating Lot.
Ammon. Mur. ʒi
Sp. vin. rect. ʒii
Liq. Am. Acet ʒii
Aq. —— ʒiv
To disperse Hydrocele in infants & children if not successful. Acupuncture

Olei Terebinthinæ
3 gr. doses in gleet from chronic inflammation of membranous portion of urethra —

Tonic mixture
[illegible] Sulph. ʒii
[illegible] ʒi
Aqua ℥ [illegible]

[illegible] Iodin [illegible] ʒi

[illegible] with [illegible]

[illegible] useful [illegible]

Linament Oscalveria [illegible]

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